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SME 1925 SME SEED (ATALOGUE)

6267



THE J. CHAS. MCCULLOUGH SEED CO.

228-230-232 EAST FOURTH STREET

[North Side, Near Sycamore Street]

PRIVATE EXCHANGE, LONG DISTANCE PHONE, MAIN 5640
Connecting all Departments

CINCINNATI, OHIO

D. N. Shoomaker

SUGGESTIONS FOR ORDERING

All varieties of Flower and Vegetable seeds are numbered. Our order sheet is arranged to save you the time and trouble of writing the names of the seeds in full.

If you send your order early the benefit will be mutual. You will have your seed on hand when the planting season arrives and it will enable us to get it out before the "please rush" time arrives.

REMITTANCES can be made by any of the following methods: Post Office Money Order, Express Co. Money Order, Registered Letter, New York or Chicago Exchange or for small amounts postage stamps. PERSONAL CHECKS on local banks cost us extra for collection but will be accepted if the customer desires.

ALL PRICES on VEGETABLE SEEDS are net, but on PACKETS, OZS. and 1/2 LBS. WE PREPAY POSTAGE.

SEEDS BY MAIL, ETC.

PARCEL POST CHARGES have greatly lowered the cost of sending packages by mail. Most customers are no doubt familiar with charges from Cincinnati and that it depends on the weight of the package and the sone. We have estimated as a general average the following rates and these are to be added to prices of bulk seeds if they be sent by mail. Lb., 5c.; pt., 5c.; qt., 10c. Larger size packages, especially in the 1st, 2d and 3rd sones will not average quite these prices.

				D	OMESTIC PARCEL POST RATES		d oz.	Additional Pound or fraction.
First Zone wi	ithin 5	0 Mile	-R			. 5a		le ·
Second "								10
Third "		0 to						20
Fourth "	" 30	0 to	600	66		. 70		- 40
Fifth "	· 60	0 to 1	000	.6		. 8e		60
Sixth "	" 100	0 to 1	400	**		. 90		8c -
Seventh"	" 140	0 to 1	800	14		. 11c	***	10c
Eighth " all	l over 18	00 Mi	les.			. 12a		120

WEIGHTS OF BULK SEEDS in measured quantities are approximately as follows:

Quarts of Peas and Beans approximately 30 ounces.

Corn, Sugar, approximately, quarts 24 ounces, pints 12 ounces.

Corn, Early and Field, quarts 28 ounces, pints 14 ounces.

Onion Sets, quarts 16 and pints 8 ounces.

The above tables will enable customers to remit the proper amount of postage.

EXPRESS AND FREIGHT CHARGES on large quantities are cheaper than Parcel Post. We charge no cartage to depots or the Express Company offices, nor do we charge for boxes, packing or for small muslin bags.

When seamless cotton bags are required they must be remitted for-48c each.

WE DO NOT SHIP ANY GOODS C. O. D. Our prices are plainly printed and if we cannot supply at the prices quoted, we will promptly notify customers. There is no reasonable doubt that vegetable seeds will be supplied at these prices, but we reserve the right to advance or decline with the market.

ABOUT WARRANTING SEEDS

We have often been asked if we "guarantee or warrant our Seeds." We beg to state plainly, we do not, for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is to our interest to send none but the best quality of seeds.

To secure success, however, it is necessary that the customer should do his part well, or our good seeds will be ruined. With the best of management and good seeds there will be an occasional unaccountable failure. The best of gardeners sometimes fail, and try again with seeds from the same lot with good results.

We give no warranty, expressed or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out and we will not be in any way responsible for the crop.

THE J. CHAS. MCCULLOUGH SEED CO.

TO OUR FRIENDS AND CUSTOMERS.







GARDEN SEED AND SALES DEPARTMENT 228-230-232 EAST FOURTH ST.

MAIN OFFICE, WAREHOUSE AND SEED CLEANING PLANT FIFTH, LOCK AND EGGLESTON AVE.

BUYERS OF SEEDS will find it worth while to devote some of their time to this catalogue. In it you will find reliable information as to varieties of seeds, bulbs, plants, etc. We hope it will be of use to all who are interested in making their vegetable gardens profitable and flower beds and lawns more attractive.

Our seeds are grown on contract by competent growers in the sections best suited to the different varieties. From our active and practical experience of 58 years in the seed business and all its branches you will find us as competent to handle the business as any one in the trade. If in need of further information do not hesitate to write us; it is to our interest to serve you. Please remember that if you order early the benefit will be mutual.

Sincerely yours,

THE J. CHAS. McCULLOUGH SEED CO.

KITCHEN GARDEN SEEDING TABLE

Name of	Seeds Re	equired for	Distance	Ready for use			
Vegetables	100 ft. Row	One Acre	In Rows	Rows Apart	from seed in about		
Artichoke	1 oz.	6 oz.	2 ft.	3 to 4 ft.	8 mos.		
Asparagus	2½ oz.	4 lbs.	1 to 2 ft.	3 to 4 ft.	3 to 4 yrs.		
Beans, Bush	ĺ pt.	1½ bush.	6 in.	2 ft.	45 to 65 day		
" Pole	1 pt.	10 to 12 qts.	3 ft.	4 ft.	65 to 90 "		
eet, Table	2 oz.	5 lbs.	4 in.	1 to 1½ ft.	60 to 75 "		
" Mangel	1 oz.	5 lbs.	8 in.	2 to 2½ ft.	150 "		
roccoli	⅓ oz.	2 02.	2 ft.	2½ ft.	120 "		
russels Sprouts	d oz.	2 02.	2 ft.	2 ft.	100 to 120 "		
labbage, early	1 0Z.	6 02.	18 in.	2½ ft.	100 to 120 "		
" late	d oz.	6 oz.	2½ ft.	3 ft.	125 to 180 "		
Carrot	1 oz.	3 to 4 lbs.	4 in.	11 to 2 ft.	75 to 120 "		
Cauliflower	₹ oz.	1 lb.	2 ft.	21 ft.	100 to 135 "		
Celery	1 02.	2 oz.	6 in.	3 to 4 ft.	125 to 150 "		
Corn, Salad	3 oz.		4 in.	12 to 18 in.	65 "		
" Sweet	ł pt. 100 hills.	8 ats.	3 ft.	4 ft.	65 to 100 "		
ress	₫ oz.	2 to 3 lbs.	1 in.	1 ft.	30 "		
ducumber	ī oz.	2 lbs.	4 ft.	4 ft.	60 to 85 "		
Egg Plant	d oz.	4 02.	21 ft.	3 ft.	150 to 160 "		
Indive	i oz.	4 lbs.	1 ft.	13 ft.	50 to 75 "		
Cale	₹ oz.	4 lbs.	2 ft.	2 ft.	100 to 120 "		
Ohlrabi	1 OZ.	4 lbs.	6 in.	1½ ft.	75 "		
eek	1 oz.	4 lbs.	6 in.	14 ft.	120 to 160 "		
ettuce	1 02.	3 lbs.	1 ft.	14 ft.	65 to 100 "		
Melons, Musk	i oz.	2 to 3 lbs.	4 ft.	5 ft.	115 to 140 "		
" Water	ĺ oz.	4 lbs.	8 ft.	8 ft.	120 to 140 "		
)kra	2 os.	10 lbs.	14 ft.	2 ft.	90 to 125 "		
Dnion	1 02.	5 to 6 lbs.	3 in.	1 ft.	135 to 150 "		
Parsley	1 oz.	3 to 5 lbs.	4 in.	1½ ft.	100 "		
Parsnip	ν̃οz.	3 to 5 lbs.	6 in.	1 tt.	125 to 150 "		
Peas	1 to 2 pts.	2 bu.	2 in.	2 to 4 ft.	50 to 75 "		
epper	d oz.	1 lb.	2 ft.	2 ft.	140 to 150 "		
otato, cut		7 to 10 bu.	1 ft.	2½ ft.	80 to 140 "		
umpkin	1 pkt.	4 lbs.	8 ft.	8 ft.	100 to 120 "		
Radish	1 oz.	8 to 10 lbs.	2 to 4 in.	11 ft.	20 to 50 4		
alsify	1 oz.	8 lbs.	6 in.	13 ft.	125 to 150 "		
pinach	1 oz.	10 lbs.	4 in.	15 in.	30 to 60 "		
Squash, Bush		4 lbs.	3 ft.	4 ft.	60 to 75 "		
" Late		4 lbs.	7 ft.	8 ft.	100 to 125 ".		
Comato		2 to 4 oz.	4 ft.	4 ft.	100 to 125 "		
Curnip	½ oz.	2 lbs.	6 in.	1 ft.	60 to 75 "		

N. B.—For last planting of beans, sweet corn, kohlrabi, peas and radishes, or even tomatoes, take the earliest varieties just the same as are used for first planting.

Late sowings of salsify are intended to remain undisturbed over winter. Roots from these sowings will, the next year, attain a size double that usually seen.



The J. Chas. McCullough Seed Co.'s "EMERALD" LAWN GRASS SEED

 $\textbf{PRICES} \left\{ \begin{array}{l} 1/2 \\ 1/2 \\ \end{array} \begin{array}{l} \textbf{LB.,} \\ 25c; \\ 1 \\ \end{array} \begin{array}{l} \textbf{LB.,} \\ 45c; \\ 3 \\ \end{array} \begin{array}{l} \textbf{LBS.,} \\ \$1.25; \\ 5 \\ \end{bmatrix} \begin{array}{l} \textbf{LBS.,} \\ \$2.00; \\ \textbf{BUS.} \\ (16 \\ \end{bmatrix} \begin{array}{l} \textbf{LBS.,} \\ \$5.00. \\ \end{array} \right.$

"EMERALD" LAWN SEED is composed of Kentucky Blue Grass, Red Top, English Rye Grass, White Clover and other fine grasses. We combine these grasses because they grow quickly and protect the blue grass, which is slower to germinate, thereby giving not only a permanent lawn but a good sod in six weeks. For 58 years we have made a study of lawns and our experiments have shown us that for quick and permanent results our "Emerald" Lawn Grass seed has never been excelled. We know that #MC Emerald Lawn seed will give satisfaction wherever a fine velvety turf is wanted, except in dense shade.

QUANTITIES.

FOR NEW LAWNS-1 lb. sows 250 sq. ft. (10 x 25). An acre requires 5 to 6 bushels (80 to 100 lbs.).

FOR OLD LAWNS—It will take about half as much seed as for a new lawn, depending on how thick a stand of grass there is, usually requiring 2 to 3 bushels per acre for renovating.

MAKING LAWNS.

PREPARATION—The soil should be deeply spaded or plowed, thoroughly pulverized and raked fine and smooth, removing all roots, stones, clods, trash, etc. If not properly graded it should be done now, allowing for water to drain off and not stand in pools. If the lawn is made of clay from recent excavations, it should be covered with 3 or 4 inches of good rich garden soil before the seed is sown.

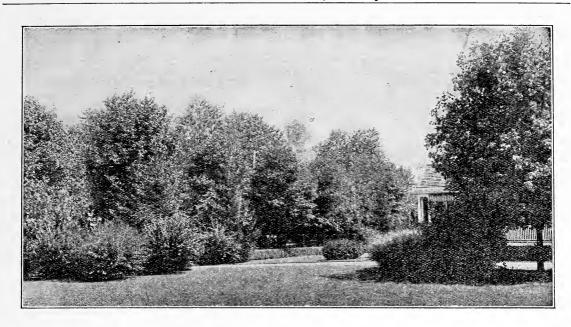
FERTILIZERS—Pulverized Sheep manure is thoroughly satisfactory for lawns. Unless stable manure is well decomposed it contains weed seeds. Sheep manure does not, therefore is preferable. Use 5 to 10 pounds to 200 sq. ft. (according to soil) working it well into the soil at time of sowing seed.

SOWING—Seed can be sown in the spring from February to May or in the fall from August to October. To get it evenly distributed half the seed should be sown one way then cross and sow balance at right angles. The seed should be covered by raking or harrowing and then well rolled.

MOWING—Cut the young grass for the first time when it is about $1\frac{1}{2}$ to 2 inches high with either a sharp scythe or a free running machine set high. It is most important to keep grass cut quite short from the very start, otherwise it will grow long and thin, instead of tillering out and covering the ground.

Never allow the grass, whether it be young or old to grow long and ragged. Two inches may be considered the extreme length to which it should attain at any time of the year. It is not advisable to keep grass too closely cut during hot and dry weather.

RENOVATING—If the grass is thin it is not necessary in most cases to plow up the entire lawn and reseed, though if it is choked with weeds and there is very little grass left it is decidedly preferable to plow up or spade up the entire lawn and seed over. Unless this is the case, however, raking over roughly with a sharp tooth rake and sowing more seed, will improve the lawn wonderfully. Grass usually dies out from lack of plant food, hence it is a good plan to apply sheep manure at the rate of 400 to 600 lbs. per acre, applied in March, after the growing season has started.



GRASS SEEDS PRESCRIBED FOR ALL SOILS AND PURPOSES

For Lawns, Shaded Lawns, Tennis Courts, Golf Courses, Bowling Greens, Cricket Grounds, Football, Baseball, and Polo Fields.

We supply in this vicinity nearly all of the cemeteries, public parks, golf courses and other places where considerable quantities of grass seed are used and are prepared at all times to furnish the highest quality seeds for all purposes.

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer the following splendid mixtures which can be relied on to be the very highest quality.

It is always advisable for those who are seeding down the shady places to supply new soil, if possible, especially if large trees are producing the shade, as their roots spread so fast as to exhaust the nourishment in the soil. When unable to supply new soil, the ground should be well dug over, and if the tree roots predominate, these should be taken out. In most shady places the soil has a tendency to be sour, and we strongly recommended the use of lawn lime (about 50 lbs. per 1000 sq. ft.) Per $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 3 lbs., \$1.30; 5 lbs., \$2.25; $\frac{1}{2}$ bu. (8 lbs.). \$3.00; 1 bu. (16 lbs.), \$5.50.

HILL SIDE OR TERRACE LAWN GRASS—For high dry situations where moisture and poor soil are conditions to be contended with. It is composed of grasses that will succeed fairly well under these conditions and produces short green turf of fair quality. Per lb., 45c; bu. (16 lbs.), \$5.00.

GOLF COURSE MIXTURES—It is most important that the best seeds be used for this and in proper proportions to produce desired results. New golf courses require somewhat different mixtures from that for old courses because it is imperative that quick sod should be obtained and one which will be lasting and produce good, green, smooth turf. From our long experience with grasses, we are better posted on the requirements for the average golf course than most of the so called specialists. The fact that we are among the largest importers of grass seeds and one of the largest cleaners of domestic sorts, enables us to offer at very reasonable figures.

FMT PUTTING GREEN MIXTURE—Composed of short, fine grasses which make smooth, even putting greens. Should be sown 100 lbs. per acre on new grounds or for renovating, the amount should be according to stand of grass. Per ½ lb., 50c; 1 lb. 75c; 5 lbs., \$3.00; 50 lbs., \$26.00; 100 lbs., \$50.00.

FAIR GREEN MIXTURE (For old courses.)—Composed of the best and most permanent grasses which produce short, green, thick turf, not in clumps but of spreading habit. It is the best mixture that is offered in this country.

Ask for prices. Requires 30 to 40 lbs. per acre according to the stand of grass already on the ground.

FAIR GREEN MIXTURE (For new courses.)—This is composed of grasses which will afford a quick, serviceable turf in a short time. We have sold it for some courses which were sown as late as April 15th and obtained such a good stand that the club was opened and the ground played on July 4th. It will give the best results in after years. The course if used too soon after seed is sown will not be in the finest condition but sufficiently good to satisfy players. Ask for prices.

For a new course, it requires 4 to 6 bus. per acre according to results desired. If for quick results, thick seedings are best. Per lb., 50c; 5 lbs., \$2.25; 50 lbs., \$18.00; 100 lbs., \$35.00.

PRICE LIST

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, or plants we send out and we will not be in any way responsible for the crop.

THE J. CHAS. McCULLOUGH SEED CO.

Pag		Pkg.	Oz.	1/4Lb		Lb.	Pag		Pkg.	Oz.	⅓Lb.	Lb.
7	ARTICHOKE Green Globe	\$0 10	\$0 60				14	BEETS, STOCK Mammoth Prize Red Man-				
	ASPARAGUS						14	gel Golden Tankard Mangel		\$0 15 15	\$0 25 25	\$0 60 60
7 7 7	Washington Palmetto Conovers Colossal	\$0 10 10 10	\$0 30 15 15	\$1 00 30 30)		14 14 14	Yellow Globe Mangel Silesian Sugar Lanes Imperial Sugar		15 15 15	25 25 25	60 75 75
	BEANS, DWARF	5 .	1/8: 1	D. O.		040				-		
8	GREEN POD Improved Early Red Valen-	_	½Pt. ∣	_				BROCCOLI				
8	Black Valentine Stringless Green Pod	\$0 10 1 10 10	\$0 20 \$0 20 20	30	55 55 55	\$2 00 2 00 2 00	15 15	White Cape Purple Cape	10 10	50 50	1 25 1 25	• • • •
8	Giant Stringless Dwarf Horticultural	10 10	20 20	30	55 55 55	2 00 2 00 2 00		BRUSSELS SPROUTS				
8 8 9	Full Measure	10 10 10	20 20 20	30	55 55	2 00 2 00	15	Perfection	10	35	90	
9 9 9	Round Yellow Six Weeks Round Yellow Six Weeks Extra Early Refugee Tennessee Green Pod	10 10 10 10	20 20 20 20	30 30 30	55 55 55 55	2 00 2 00 2 00 2 00		CABBAGE, FIRST EARLY SORTS				
9	Fordhook Favorite BEANS, DWARF	10	20	30	55	2 00	15 15	Early Jersey Wakefield Early Winningstadt	10 10	30 30	1 00 1 00	
9	FOR SHELLING Dwarf White Navy		15	20	40	1 25	16 16	Charleston Wakefield Copenhagen Market	10 10	30 35	1 00 1 10	
9	Dwarf White Marrow Dwarf White Kidney		15 15	25 25	40 40	1 50 1 50						
9	Dwarf Red Kidney BEANS, WAX		15	25	40	1 50		CABBAGE, SECOND EARLY SORTS				
10	PODDED SORTS Wardwells Kidney Wax	10	20	30	55	2 00	16 16	Louisville Drumhead Glory of Enkhuizen	10 10	30 30	1 00 1 00	
10 10	Dwarf Black Wax	10 10	20 20	30 30	55 55	2 00 2 00	16 16	All Seasons Early Dwarf Flat Dutch	10 10	30 30	1 00 1 00	
10 10 10	Golden Wax	10 10	20 20 20	30 30 30	55 55 55	2 00 2 00 2 00	16 16	Hendersons Early Summer. Allhead Early	10 10	30 30	1 00 1 00	
10	Michigan White Wax BEANS, POLE OR	10	20	30	55	2 00		CABBAGE, LATE				
11	CORN FIELD Black Ky. Wonder	10	0.0	25		2 25	17 17	Late Flat Dutch Large Late Drumhead	10 10	25 25	80 80	
11 11	Improved Kentucky Wonde White Kentucky Wonder	10	20 20 20	35 35 35	60 60 60	2 25 2 25	17 17	Danish Ballhead	10 10	35 25	1 10 75	
11 11	Cut Short or Corn Hill Horticultural Pole or Cran-	-	20 20	35 30	60	2 25 2 00	17 17 17	Amer. Drumhead Savoy Red Pe-Tsai-Chinese	10 10 10	30 35 30	1 00 1 10 1 00	
11 11	berry	. 10 10	20 20 20	30 30	55 55 55	2 00 2 00	1	1 e-1 sar-Onniese	10	30	1 00	
11 11	Ohio Pole Wax	10	20 20	30 30	55 55	2 00 2 00		CARROTS				
	BEANS, LIMA, DWARF						18 18	French Forcing Early Scarlet Horn	10 10	15 15	50 50	••••
12	Lima	. 10	25	40	70	2 50	18 18 18	Oxheart	10 10 10	15 15 15	50 50 50	
12 12 12	Fordhook Bush Lima Burpees Bush Lima Hendersons Bush Lima	10	30 20 20	50 35 30	90 60 55		18 18 18	Nantes Half Long Scarlet Improved Long Orange	10 10 10	15 15 15	50 40 40	
	BEANS, LIMA,						10	Large White Belgian	10	13	70	••••
12 12			20	30	55	2 00	,,,	CAULIFLOWER	20	2 50		
12 12	King of Garden Extra Large White Small Lima or Sieva	. 10	20 20 20	30 30 30	55 55 55	2 00 2 00 2 00	19 19 19	Earliest Snowball Early Dwarf Erfurt Danish Giant	20 20 20	2 75 2 75		
	BEETS, TABLE	Pkg.		⅓L	b.	Lb.						
13 13	tian	. 10			35 35	1 25 1 25		CELERY		•	4 00	
13 13	Early Eclipse Norwood Blood Turnip	. 10 . 10	15 15	3	5 5	1 25 1 25	19 19 20	Improved White Plume Golden Self Blanching Giant Pascal	10 10 10	30 40 25	1 00 1 50 75	
13 13 13	Extra Early Bassano	. 10			5 5	1 25 1 25	20 20	Dwarf Golden Heart Sanfords Easy Blanching	10 10	25 30	75 1 00	
14	nip Improved Early Blood Tur	. 10 •			5	1 25	20 20	Celeriac		25		25
14 14		. 10	15	3	5 5 5	1 25 1 25 1 25		CHICORY				
14 14	Long Smooth Blood	. 10	15 15	3 3	5 0	1 25 1 00	20	Witloff or French Endive	10	25	60	
			AL	.L 100 P	AUK	EIS AR	E, 3 F	PACKETS FOR 25c.				

PRICE LIST—Continued

Pa	ge CORN	Pkg.	½Pt.	Pt. Qt.	4 Qts.	Pa	ige LEEK	Pkg.	Oz.	¼Lb.	Lb.
21 21 21 21 21	Extra Early Adams. Early Adams. Golden Bantam. Golden Cream. Bantam Evergreen.	10 10 10	\$0 15 \$0 15 20 20 20	20 35 30 56 30 56 30 56	5 1 25 0 1 75 0 1 75 0 1 75	26 26		\$0 10 10	\$0 20 20	\$0 65 65	\$
21 21 22	Premo	10 10 10	20 20 20	30 50 30 50 30 50	0 1 75		LETTUCE, CURLED				
22 22 22 22 22 22 22 22 22	Mammoth White Cory. Country Gentleman. Stowells Evergreen. Zigzag Evergreen. Late Mammoth. Club Zig-Zag Evergreen. Early Mammoth. Howling Mob.	10 10 10 10 10 10 10	20 20 20 20 20 20 20 20 20	30 50 1 75 30 50 1 75		27 27 27 27 27 27	Grand Rapids Black Seeded Simpson Early Curled Simpson Early Curled Siesian Early Prize Head LETTUCE, HEAD	10 10 10 10 10	20 20 20 20 20 20	70 70 70 70 70	
22 22 22	Early Minnesota Kendels Early Giant Crosbys Early	10 10 10	20 20 20	30 50 30 50 30 50	1 75		OR CABBAGE				
	POP CORN	Pkg.	Oz.	¼Lb.	Lb.	27 27 27	May King	10 10	20 25 25	70 90 90	
23 23 23	Rice White Pearl Queens Golden			\$0 10 10 10	\$0 20 20 20	28 28 28 28 28	Top Notch. Big Boston. California Cream Butter Improved Hanson Salamander	10 10 10 10 10	25 20 20 20	90 70 70 70	
	CORN SALAD					28 28	New York Head Cos or Romaine	10 10	30 25	1 10 90	
23	Large Seeded	10	15	40							
	CRESS						MUSK MELON, GREEN FLESH				
23 23	CurledWater	10 10	15 50	40 1 50		29	Honey Dew	10	15	50	
	CUCUMBER					29 29 29	Queen of Gems Rockyford Netted Gem	10 10 10	15 15 15	40 40 40	
23 23 23 23 24 24	Improved White Spine Improved Long Green Davis Perfect Early Frame. Early Fortune. Jersey Pickling.	10 10 10 10 10 10	15 20 15 15 15	40 60 40 40 40 40	1 25 2 00 1 25 1 25 1 25 1 25	29 29 29 30	Green Nutmeg	10 10 10 10	15 15 15 15	40 40 40 40	
24 24 24 24 24 24 24	Green Prolific Nichols Medium Green Early Green Cluster Cool and Crisp Japanese Climbing Gherkin or Burr	10 10 10 10 10	15 15 15 15 15 15	40 40 40 40 50 50	1 25 1 25 1 25 1 25 1 25 1 50 1 50	30 30	MUSK MELON, SALMON FLESH Pollock's No. 10-25 Burrells Gem	10 10	15 15	40 40	
	EGG PLANT			•	. 00	30 30	Emerald Gem Tiptop	10 10	15 15	50 50	
24 24	Black Beauty New York Improved	10 10	40 40	1 50 1 50		30 30 30	Paul Rose Osage or Millers Cream Banana	10 10 10	15 15 15	40 50 50	
	ENDIVE										
25	Green Curled	10	15	50			WATER MELON			,	4.00
25 25	Broad Leaf Batavian Moss Curled	10 10	15 15	50 50		30 30 30 31	Tom Watson. Kleckleys Sweet. Florida Favorite. Kolbs Gem	10 10 10 10	15 15 15 15	30 30 30 30	1 00 1 00 1 00 1 00
~-	GARLIC			Λ		31 31	Sweetheart Peerless or Ice Cream	10 10	15 15	30 30	1 00 1 00
25	Bulbs	••••	••••	15	40	31 31 31	Gray Monarch Long Light Icing Gypsy	10 10 10	15 15 15	30 30 30	1 00 1 00 1 00
25 25 25 25 25	AniseBasil (Sweet)Caraway Caraway Flavoring onlyCoriander	10 10 10	20 25 20 10 20		45	31 31 31 31 31 31	Halberts Honey. Dark Icing. Pride of Georgia. Citron. Dixie.	10 10 10 10 10	15 15 15 15 15	30 30 30 30 30	1 00 1 00 1 00 1 00 1 00
25 25 25	Dill Fennel, Sweet	10 10	20 20				MUSTARD				
25 25	Lavender (Sweet)	10 10 10	40 40 40			32	Southern Giant Curled	10	15	30	
25 25	Summer Savory Thyme	16 10	40 40			32 32	WhiteBlack	10 10	15 15	30 30	
	KALE						MUSHROOM SPAWN	ı			
26 26 26 26	Dwarf Green Curled Dwarf Curled Siberian Dwarf Green Scotch Tall Scotch	10 10 10 10	15 15 15 15	30 30 45 45	85 85 1 50 1 50		(See Page 32)				
	KOHL RABI						OKRA OR GUMBO	10	4.5	05	
26 26	Early Purple Vienna Early White Vienna	10 10	20 20 ALL	70 60 . 10c PACI	 KETS AR	32 32 32 E 3 F	White Velvet Dwarf Prolific Perkins Mammoth PACKETS FOR 25c.	10 10 10	15 15 15	25 25 25	

PRICE LIST—Continued

Pag	ge ONION	Pkg.	Oz.	¼Lb.	Lb.	Pa	ge RADISH, LONG	Pkg.	Oz.	⅓ L b.	Lb.
33 33 33 33 33 34 34	Large Red Wethersfield Yellow Flat Danvers Yellow Dutch Yellow Globe Danvers Ohio Yellow Globe Australian Brown. Prize Taker. White Portugal or Silver	\$0 10 10 10 10 10 10 10	\$0 20 15 15 20 20 15 25	\$0 60 50 50 60 60 40 75		41 41 41 41 41 41	Cincinnati Market	\$0 10 10 10 10 10 10	\$0 15 15 15 15 15 15	\$0 30 30 30 30 30 30 30	\$1 00 1 00 1 00 1 00 1 00 1 00
34	Skin White Globe	10 10	25 25	75 7 5			RADISH, FALL				
34 34 34	PARSLEY Champion Moss Curled Hamburg Rooted Plain Leaf.	10 10 10	15 15 15	30 30 30		42 42 42 42 42	Long Black SpanishRound Black SpanishSearlet China WinterWhite Chinese	10 10 10 10	15 15 15 15	30 30 30 30	1 00 1 00 1 00 1 00
	PARSNIPS					49	RHUBARB	10	00	co	
35 35	Sugar or Hollow Crown Long White	10 10	15 15	50 50		42	Linnaeus	10	20	60	••••
	PEAS, EARLY					42	SALSIFY Mammoth Sandwich Island.	10	20	60	
35	SMOOTH Maud S	\$0 10 \$	0 20 \$0	Pt. Qt. 4 30 \$0 50			SPINACH				
35 35 36	J. C. McC. Extra Early Alaska Tom Thumb	10 10 10	20 20 20	30 50	1 75 1 75 1 75	43 43 43	King of Denmark	10 10 10	15 15 15	25 25 25	75 50 50
	PEAS, EARLY WRINKLED					43	New Zealand	10	15	30	••••
36 36 36 36 36	Gradus Thomas Laxton Laxtonian. Little Marvel American Wonder	10 10 10 10 10	20 20 20 20 20 20	35 60 35 60 35 60 35 60 35 60	2 00 2 00 2 00 2 00 2 00 2 00	43 43 43	SQUASH, SUMMER Early White Bush Golden Summer Crookneck. Fordhook	10 10 10	15 15 15	50 50 50	1 50 1 50 1 50
36 36 36	Notts Excelsior	10 10 10	20 20 20	35 60 35 60 35 60	2 00 2 00 2 00	43 43 43	SQUASH, WINTER Golden Hubbard Warted Hubbard Boston Marrow	10 10 10	15 15 15	50 50 30	1 50 1 50 1 00
27	CROP VARIETIES	10	00	20 50		43	Vegetable Marrow	10	15	50	1 50
37 37	Bliss Everbearing Daisy or Dwarf Telephone.	10 10	20 20	30 50 30 50	1 75 1 75	44	TOMATO, EARLY Purple King	- 10	35	1 00	
37 37 37 37 37 37 37	PEAS, LATE Duke of Albany	10 10 10 10 10 10	20 20 20 20 20 15 15	30 55 30 55 30 55 30 55 25 45 25 45 35 60	1 90 1 90 1 90 1 90 1 75 1 75 2 00	44 44 44 44 44 44 44	Sparks Earliana June Pink Chalks Early Jewel Dwarf Champion John Baer Bonny Best	10 10 10 10 10 10	35 35 35 35 35 40 35	1 00 1 00 1 00 1 00 1 00 1 35 1 00	
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38 38	Improved Virginia Spanish	::	10 10	15 25 15 25	::::	44 44 45 45	Beauty	10 10 10 10	36 25 50 35	1 00 85 1 50 1 00	
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38	Pimento	10 10	40 30	1 25 1 00			TURNIP			-	
39 39 39 39 39	PUMPKIN King of Mammoths Japanese Pie. Tennessee Sweet Potato Cashaw Crookneek Large Cheese Kentucky Field RADISH, ROUND	10 10 10 10 10 10	15 15 15 15 15 15	40 40 40 40 25 25	1 50 1 50 1 50 1 50 75 60	46 46 46 46 46 46 46 46 46	Early Purple Top Milan Purple Top Strap Leaf Purple Top Globe Early White Flat Dutch White Egg Long White Cow Horn Yellow Aberdeen Yellow Globe Seven Top American Purple Top Ruta-	10 10 10 10 10 10 10 10	15 15 15 15 15 15 15 15	35 25 25 25 25 25 25 25 25 25 25	1 25 75 75 75 75 75 75 75 75 1 00
40 40 40 40 41 41 41	Early White Tip Scarlet Early White Turnip Golden Globe White Stutgart French Breakfast Early Scarlet Turnip Early Scarlet Globe Non Plus Ultra	10 10 10 10 10 10 10	15 15 15 15 15 15 15 15	30 30 30 30 30 30 30 30 30 10c PACKE	1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00	46 46 46 46 23 P	TOBACCO	Pkg. \$0 10 10 10 10	15 14 Oz. \$0 50 50 50 50 50	25 1 Oz. \$1 25 1 25 1 25 1 25 1 25	\$

GENERAL LIST OF SELECT VEGETABLE SEEDS

SEE PAGES 4, 5 AND 6 FOR PRICES) **≡**

Postage paid on Seeds at pkt., oz., $\frac{1}{4}$ lb., and $\frac{1}{2}$ pt. rates. On larger quantities add 5c per pt., 5c per lb., 10c per qt. to prices.

EXPRESS RATES on Seeds, Bulbs, etc. have been considerably reduced in the last few years.

ARTICHOKE

O GREEN GLOBE—Grown for its undeveloped heads, which are cooked like Asparagus and sometimes used as a salad. Half an ounce produces 300 plants sufficient for a good-sized garden. Six ounces per acre.

Culture—Sow in April in rows 15 inches apart and one inch deep, thinning out to four inches and transplanting the following spring to rows 3 feet apart and 2 feet petween the plants. In this climate Artichokes require protection with litter or manure during the winter.

Artichokes produce large crops and should be more extensively planted. Produce 200 to 300 bushels per acre. One quart cut, plants 60 to 75 feet, 5 to 6 bushels per acre. Plant in rows and cultivate like potatoes, afterwards dig and put in kilns or leave in ground for hogs to root out.

ASPARAGUS

Should be in every permanent garden, as it is one of the earliest and most delicious of spring vegetables. A good bed will last 15 to 20 years, and as a commercial crop properly attended to, is very profitable, an acre frequently yielding \$300.00. One ounce sows 50 ft. producing about 500 plants; 10 lbs. sow one acre. One pound produces plants enough to set one acre.

Roots can be set in February or March, or in the fall, in October or November.

100 roots plant a bed 100 feet long and are sufficient for a medium garden. An acre requires 4000 to 7000 roots.

CULTURE—Growing Roots—Asparagus seed is sown in March or April one inch deep, in rows fifteen inches apart. Keep clean with hand tools and thin out the plants to four inches apart. When one or two years old, set in permanent beds.

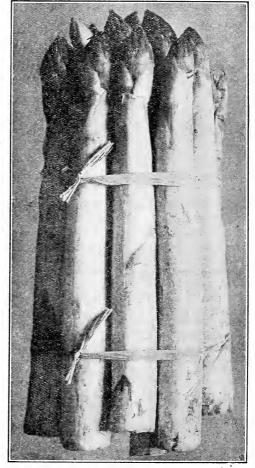
Growing Asparagus—The size of asparagus depends more on high fertilization than on the variety. Well drained, rich soil, where it will not be in the way when the rest of the garden is plowed is best. Two year old roots give quickest results. Plow or dig out a trench 18 inches wide, six to ten inches deep, making the trenches six to eight feet apart. In the bottom of the furrow use four to six inches of well rotted manure, then cover with two or three inches of good soil. The roots are set twelve to fifteen inches apart and should be spread out carefully and afterwards covered with about two inches of soil. Do not cover with too much soil the first year, but the following years they can be hilled up. If white asparagus is wanted the beds should be thrown higher than if wanted for green asparagus.

Do not cut asparagus too late in the Spring, as it exhausts the plant. The most practical growers on the day they stop cutting, throw down the beds with a plow, then harrow the ground, leaving the plants to grow. In November the tops are cut off and a mulch of manure put on the top of the rows, which is afterwards worked into the soll, when the beds are thrown up in the Spring.

For a small garden asparagus roots can be set in double rows instead of single.

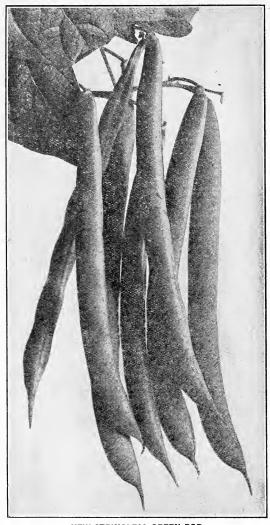
INSECT REMEDIES—For the asparagus beetle, spray with Arsenate of Lead, 3 lbs. to 50 gallons of water. Or dust with Slug Shot, air slacked Lime or dry Arsenate of Lead, while the dew is on the plant.

- 1 WASHINGTON—This variety has proven as nearly Rust-Proof as is possible to produce Asparagus. It is much in demand on account of its heavy yield and fine flavor. The stalks are of rich, dark green color, tinted darker at tips.
- 2 PALMETTO—An early maturing and very prolific variety, producing an abundance of very large deep, green shoots of the best quality.
- 3 CONOVER'S COLOSSAL—An old favorite, well known sort, producing very large shoots; tips somewhat blunted and slightly tinged with purple.



PALMETTO ASPARAGUS

ASPARAGUS ROOTS—Strong 2 year old roots, Palmetto, 50 roots, 85c.; per 100, \$1.50. Conover's Colossal, 50 roots, 85c; per 100, \$1.50.



BEANS

DWARF OR BUSH

Sometimes called String Beans, Snap Beans, etc.

(See Page 4 for Prices)

Always popular and easily grown. If planted every two or three weeks, commencing after all danger of frost has passed and continuing until about August 15th, a supply will be kept up during the whole summer.

ONE PINT PLANTS ABOUT 100 FEET. AN ACRE REQUIRES 1 TO 1½ BUSHELS. HALF PINT PLANTED EVERY 3 WEEKS IS SUFFICIENT FOR A MEDIUM GARDEN. THEY ARE READY FOR THE TABLE FROM 40 TO 50 DAYS AFTER PLANTING.

CULTURE—To produce the best results, Beans should have a good soil and deep or thorough tillage before planting and shallow cultivation afterwards to prevent too much disturbing of the roots. Land which was planted in other crops is better than that freshly manured, and sheep manure, one or two hundred pounds per acre, will give excellent results. For field culture plant in rows 2½ feet apart, dropping the beans 3 or 4 inches apart in the rows, covering about 2 inches with soil. In small gardens rows may be 18 inches apart. Up to the time of blooming, cultivate often, but never while the vines are wet, and do not disturb the roots, especially after blooming, as they will blight and the crop will be reduced. Constant picking extends bearing.

INSECT REMEDIES—For the Bean Leaf Beetle which eats holes in the leaves, or the Blister Beetle, spray with arsenate of lead, 2 lbs. to 50 gallons of water.

For the Bean Aphis or Lice, spray with diluted Kerosene Emulsion or "Black Leaf 40."

For Fungus diseases and rust, spray with Bordeaux Mix-

Postage paid on pkts. and $\frac{1}{2}$ pts. On pints remit 5c; on quarts 10c extra if to be sent by mail.

GREEN PODDED VARIETIES

NEW STRINGLESS GREEN POD

4 IMPROVED EARLIEST RED VALENTINE—A well known very early sort. Pods of medium length about 4½ inches long of medium green color, curved, cylindrical, with crease in the back, very fleshy, crisp and tender. Vines medium to large, erect with dark green leaves. Seed long, purplish pink, splashed with light buff.

- BLACK VALENTINE—Matures very early. Pods long, round, straight and of excellent quality.
- BURPEE'S STRINGLESS GREEN POD-A very handsome long, cylindrical medium maturing green bean. Pods larger than those of the Valentine and straighter. Very fleshy and remain crisp and tender longer. Vines of vigorous growth and productiveness. Seeds oval, light brown in color. A very desirable sort for home gardens and largely grown for market.
- 7 GIANT STRINGLESS GREEN POD—A highly productive and very handsome sort. Vines vigorous, spreading. Pods large, round, averaging larger and straighter than the Stringless Green Pod, but a few days later. Seed long, slender, buff color.
- 8 DWARF HORTICULTURAL—Very popular in most localities, especially for market, as they are valuable both for snap beans and shelling. They become fit for use as shelled beans early, and in this condition the beans are large, easily shelled and equal to Lima Beans in quality. The vines are very productive, compact and upright in growth, with large leaves. The pods are 5 to 5½ in. long, broad, thick, curved and have splashes of bright red on vellowish groon. Seeds large evel plump to be buff spleshed with red bright red on yellowish green. Seeds large, oval, plump, pale buff splashed with red.
- FULL MEASURE—A very desirable round-podded variety with pods 6 to 7 inches long, which are solid, meaty, brittle and stringless. It is a little later than Stringless Green Pod and is a splendid Bean for home or market use.
- REFUGEE (late or 1000 to 1). One of the best sorts for late planting and especially desirable for canning and pickling. The vines are large, spreading, very hardy, with small, smooth light green leaves. The beans are borne in great profusion, pods being about 5 to 5½ inches long; cylindrical, slightly curved, medium green, afterwards becoming light yellow, slightly splashed with purple. The seed is long, cylindrical, light drab thickly dotted and splashed with purple.

BEANS-Dwarf or Bush Cont'd

(See Page 4 for Prices)

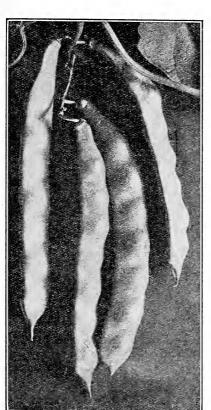
Packets and half pints postage paid. For pints remit 5c, for quarts 10c, if to be sent by mail.

11 BOUNTIFUL—An Improved Long Yellow Six Weeks, in that it is earlier, very much larger and more tender. It is very hardy, extremely early, very prolific, and bears continuously for several weeks. Pods are flat, absolutely stringless, rich green, very large and handsome. The seed is yellow, long, resembling Six Weeks. For very early or very late planting is very desirable for both home garden and market.

12 LONG YELLOW SIX WEEKS—A popular old variety, extra early, producing long flat pods, not stringless, hence is valuable only for earliest planting or late use for pickles. The seed is kidney shaped, large, of yellow color with red circle around the eye.

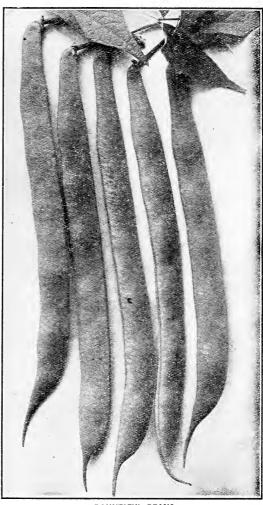
13 ROUND YELLOW SIX WEEKS—Similar to the Long Yellow Six Weeks in general appearance of vine. The pods are somewhat shorter and more stringless. The seed is medium size, round, light yellow.

14 EXTRA EARLY REFUGEE—Extremely early. Pods



TENNESSEE GREEN POD

light green, slightly curved and about 5 inches long. Excellent for early markets, as it stands shipment well. Vines very prolific, vigorous. Seed, long, cylindrical, drab color, generally covered with purple blotches.



BOUNTIFUL BEANS

15 **TENNESSEE GREEN POD**—A dwarf, early, snap bean, which is very popular in Eastern Tennessee and Southern Kentucky. Seed is brown, a little larger than Kentucky Wonder, very hardy and more capable of withstanding inclement weather than most other sorts. The vines are large, somewhat spreading, prolific. The pods are very long (often 6 to 7 inches), flat, irregular in shape, dark vivid green color.

16 FORDHOOK FAVORITE—The bushes grow 18 to 20 inches high, are very vigorous, and remarkable for their prolific character. The pods measure from 5½ to 6½ inches long.

They are brittle, juicy and absolutely stringless at all stages of growth. The seed, being white, can be used for dried beans in the winter.

DWARF BEANS—For Shelling only

Usually profitable as a farm crop especially in Northern sections.

CULTURE—Plant in rows about $2\frac{1}{2}$ feet apart. The Navy require about $\frac{1}{2}$ bu. per acre. Other sorts about a bushel.

17 **DWARF WHITE NAVY**—The well known small oval white variety so largely used in all sections.

18 DWARF WHITE MARROW—Beans oval about double as large as Navy. Vines vigorous and productive.

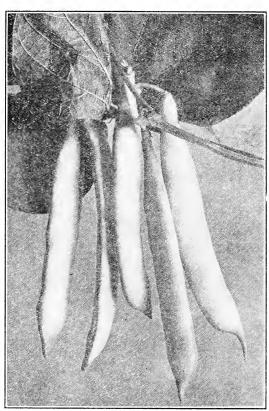
19 DWARF WHITE KIDNEY—Large, white kidney shaped slightly flattened. Pods about six inches long, large and coarse. Beans excellent quality either green or dry.

20 DWARF RED KIDNEY—Similar to above but dark pink color. Very salable.

INOCULATION FOR BEANS—Excellent results will be obtained by treating the seeds of beans with Inoculation Bacteria before planting. It can be easily done. We have it put up in convenient size for small gardens. (See Page 81.)



DWARF BLACK WAX



BEANS—DWARF OR BUSH

(See Page 4 for Prices)

WAX PODDED SORTS

These find ready sale in northern markets, and are largely planted by southern growers for shipping. The pods vary from light to golden yellow color.

Pkts. and ½ pts. mailed at prices. For pints remit 5c, and quarts 10c extra if to be sent by mail.

21 WARDWELL'S KIDNEY WAX—A variety which matures a little later than the Golden Wax, yields large crops of long, nearly straight, broad pods of light golden yellow color. They are extremely showy, consequently are ready sale and most profitable for market gardeners and an excellent variety for growing for home gardens. The seed are large, flat, kidney shape, white with dark markings about the eye.

22 DWARF BLACK WAX-One of the most popular varieties for home use and market. The pods are about 4½ inches long, slightly curved, round, very brittle and tender. They are very fleshy, clear golden yellow color and remain tender a long time. Seed are long, round, medium size, shiny black.

23 CURRIE'S RUST PROOF WAX—A variety which is claimed to be rust proof. The vines are very vigorous, hardy, productive. Pods, light yellow, similar in shape to Golden Wax, 5½ to 6 inches long. Matures early and is a splendid sort for market gardens and excellent for home use. The seed is long, oval, medium size, purplish

24 DWARF GOLDEN WAX—An early maturing variety very productive. Vines erect, compact, bearing the pods well off the ground. Pods nearly straight, broad, flat, golden yellow, very fleshy and wax like, usually 4½ to 5 inches long. Seed medium size, oval, white blotched with purple. A good sort for home garden, either for table use or pickling.

25 ROUND POD KIDNEY WAX-Very similar to Pencil Pod Black Wax and one of the best round podded wax sorts. Vines 12 to 14 inches high, pods large, 5½ to 6 inches long. Rust proof, early and fine for market or home use.

26 DAVIS WHITE WAX—A very hardy productive variety which is popular with truckers growing for northern markets and market gardeners. The vines are very vigorous and productive. Pods straight, $6\frac{1}{2}$ to 7 inches long, light yellow, and when young are very crisp and tender. The seed is kidney shape, clear white, excellent for baking.

27 MICHIGAN WHITE WAX—A splendid variety and one of the earliest Dwarf Wax Beans. Pods are 4½ to 5 inches, long, flat, usually very uniform in size, attractive and of light golden yellow color. An excellent variety both for home use and market gardening and canning. Seed are oval, small, clear white, somewhat resembling the white beans of commerce and are excellent for baking or boiling.

POLE OR CORNFIELD **BEANS**

These are very profitable and usually command good prices on the markets and are more easily and economically gathered than the Dwarf Beans. Can be planted to run up good, strong poles and some varieties are desirable to use on strong growing corn.

Culture-Pole Beans are more sensitive to cold and wet than Dwarf Varieties, hence should not be planted too early. Use poles from 6 to 8 feet long in rows 4 feet apart, placing the poles about 3 feet apart in the row. If the poles are DWARF GOLDEN WAX

slanted slightly to the north, the vines climb better and the pods are more easily seen. In home gardens three poles Around each pole plant 4 to 6 beans from 1 to 2 inches deep.

When ready to run, thin to four plants and see that they all climb the same way, as if trained wrong they will not climb. If to be planted in corn, this should be done after the corn is well started and has had two or three workings.

POLE OR CORNFIELD BEANS

(See Page 4 for Prices)

BLACK KENTUCKY WONDER

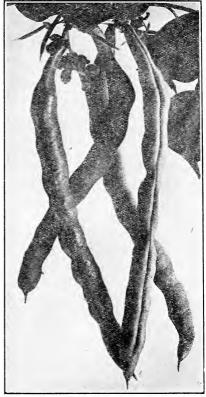
28 Introduced by J. Chas. McCullough. Plant of large growth, climbs well, very compact, and exceedingly productive. Snap pods very large, 7 to 9 inches long, 8 to 10 seeded, extremely fleshy and very brittle. Suitable for either snap or green shell purposes. Undoubtedly the best late green podded sort for snap purposes.

29 IMPROVED KENTUCKY WONDER (or Old Homestead)—A well known variety and one of the most popular of all Pole Beans, especially in the middle sections. The vines are very vigorous, heavy and very prolific, hence not desirable to use for planting in corn. Pods are of irregular shape, bright green, very long, often reaching 9 to 10 inches. They are very tender, crisp and stringless when young, but become irregular and spongy as the beans ripen. The seed is long, oval, slightly flattened and brown or dun colored.

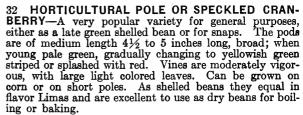
30 WHITE SEEDED KENTUCKY WONDER. (St. Louis Perfection White)—Similar to the above, excepting that the beans are different shape and solid white. It is early maturing, very desirable for snap beans and an excellent variety for green shelling and unsurpassed in quality as baked beans. Very profitable for market gardeners and

highly prized in all sections.

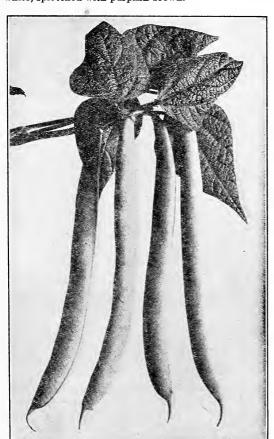
31 RED SPECKLED CUT-SHORT or CORN HILL. A very popular variety in Central and Southern States especially for planting among corn. It will give a good crop without the use of poles. The vines are not as heavy as Kentucky Wonder, being medium size, vigorous, twining loosely, with dark colored leaves. Pods are 3 to 3½ inches long, straight, flat, fleshy and of good quality. As they mature the pods become light yellow tinged with red, the beans showing distinctly through the pods. The seed are small, round, light greyish white, splotched with purplish brown.



IMPROVED KENTUCKY WONDER POLE BEANS



- 33 WHITE CREASEBACK—An extremely early variety, which produces nearly all its pods at the same time. The vines are medium size and vigorous, and in rich soil wonderfully productive, bearing round, fleshy pods in clusters of from 4 to 12, which makes it extremely easy to gather. Pods are about 5 inches long, comparatively straight, attractive, light green, very fleshy, with a crease down the center. Makes excellent quality snaps and stands shipping well. Beans are small, oblong, clear white.
- 34 LAZY WIFE—A somewhat late maturing variety, bearing medium green pods in large clusters. Pods are 5½ to 6½ inches long, broad, thick fleshy and entirely stringless. When young they have a rich flavor which is retained until they are nearly ripe. An excellent sort for either snap green shelling, or using as dry beans. Seed white, medium size and generally round.
- 35 OHIO WAX POLE—Pods usually 7 inches long, solidly meaty and entirely stringless; commences to bear when scarcely higher than the bush variety, and keeps on producing until killed by frost.
- 36 GOLDEN CLUSTER WAX—One of the best Wax podded pole snap beans. The vines are large, strong growing, vigorous and hardy. Pods 6 to 8 inches long, borne in clusters and vary in color from golden yellow to creamy white. The seeds are medium size, flattened, oval, dull white.



WHITE CREASEBACK

LIMA BEANS

DWARF OR BUSH VARIETIES

(See Page 4 for Prices)

These are preferred in small gardens, as they can be grown like Dwarf Beans, and without the use of poles. They are not quite so prolific as the Pole Limas, but are earlier and continuous bearers throughout the season. The beans can be gathered much easier than the Pole Limas and they can be grown closer together.

CULTURE—All Lima Beans are tender and the ground should be dry and the weather warm and settled before planting. They do best in good light soil, and if not rich, an application of sheep manure or other good fertilizer will be well repaid. Plant in drills 1½ to 2 feet apart, dropping the beans 4 to 5 inches apart and covering about 2 inches deep. Cultivate often until they commence to flower, but only when the leaves are dry.

1 pint of Small Seeded Lima plants 100 to 125 feet and is sufficient for an ordinary garden. 1 quart of other sorts plants about the same space. For succession, make two plantings four weeks apart. Mature in 75 to 90 days from planting.

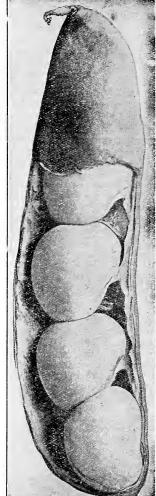
37 BURPEE'S IMPROVED BUSH LIMA—Pods and beans are both larger and thicker than Burpee's Bush Lima, and fully eight days earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans are of the most luscious flavor.

38 FORDHOOK BUSH LIMA-A very vigorous and erect growing variety, bearing its pods well above the ground in large clusters. Pods are medium green, about 5 inches long and contain 4 to 5 large thick beans of exceptionally fine quality. We consider this one of the best of the large seeded kinds.

39 BURPEE'S BUSH LIMA-A bush form of the Large White Lima type. Plants are somewhat dwarf but very productive. Pods are

medium green, broad, containing 3 to 4 very large flat beans of the best quality. Seed large flat, white, slightly greenish tinge.

40 HENDERSON'S BUSH LIMA—An exceedingly productive variety of dwarf habit. Commences bearing very early and continues to grow and set pods until stopped by frost. The vines are without runners, somewhat dwarf, very productive. Beans small, white and most excellent quality either for green shelling or as dry beans.



FORDHOOK BUSH LIMA

POLE LIMA BEANS

Large seeded sorts require 1 quart to 100 poles, 3/4 bu. to an acre. Small Limas require about one-third the quantity.

CULTURE.—These are to be treated like other Pole Beans excepting they should be planted one or two weeks later. Where soil is very stiff, it is best to plant the beans with the eye downward, as they will come up more rapidly.

41 FORD'S MAMMOTH PODDED—The result of 20 years' selection by a market gardener near Philadelphia. It far surpasses in size and productiveness many other sorts and has become very popular throughout all sections. Pods are very large, usually containing 4 to 6 beans. Vines vigorous, setting the beans early and very productive. Beans medium size, excellent quality.

KING OF THE GARDEN—A favorite sort on account of its large size and abundant yield. The beans are of greenish color, very tender and delicious. 43 EXTRA LARGE WHITE POLE LIMA—A choice variety of the Large Lima. Pods and beans of large size and a good cropper. Quality unsurpassed.

44 SMALL LIMA OR SIEVA—Also called Butter or Carolina. Not as large as the other varieties but a good bearer and about 10 days earlier.



BEET TABLE VARIETIES

(See Page 4 for Prices)

These are popular in all gardens and as a rule a very profitable crop for market gardeners. Beets fresh from the garden are always more tender and delicious than those that are shipped. They can be sown in succession for different seasons and if too many are produced for table use, make excellent food for poultry and stock.

CULTURE—A deep loamy or sandy soil is best suited to beets. If wanted very early they can be sown in hot beds and transplanted in the open ground when the weather has moderated, but the outer leaves should be trimmed off when transplanting is done. The earliest outdoor sowing is done in March or April, in rows 15 to 18 inches apart, thinning or transplanting the plants to 3 or 4 inches apart in the rows. For winter use, sow in June or July. Roots can be stored in pits or cellars covering with sand to keep from wilting.

One ounce sows 100 feet of drill. 7 lbs. one acre. Ready for use 60 to 75 days after sowing.

45 CROSBY'S IMPROVED EGYPTIAN—An improved sort which is very popular with market gardeners on account of its quick growth, extreme earliness and general good qualities. The tops are small, roots flattened but slightly globe shaped and very smooth. Exterior bright red and inside deep vermillion red zoned with a lighter shade. It is one of the very best, sweet and tender varieties, of excellent quality and popular both with the market gardener and for home use. It becomes fit to use earlier than any other variety and is much superior to some of the older sorts.

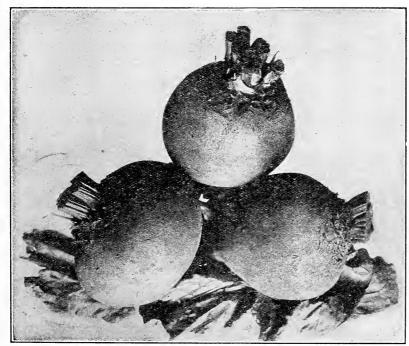
46 **DETROIT DARK RED**—Very early and becomingly popular. Produces medium size globe-shaped roots which are very smooth and of dark blood red color.

CROSBY'S IMPROVED EGYPTIAN

Very desirable for bunching. Comparison of this with other varieties proves that Detroit Dark Red is the most uniform beet in size and most attractive in color. It is splendid for market or home gardens on account of its uniform deep red color and most desirable for canning.

47 EARLY ECLIPSE—This has long been a popular variety for home gardens and market growing. The tops are small, roots bright deep red, smooth, round or slightly top-shaped with a very small tap root. It is splendid for bunching; is very sweet, crisp and tender, especially when young.

48 NORWOOD BLOOD TURNIP—A superb early maincrop Beet. Both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, deep through, smooth, and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. Foliage is small, of a rich bronze color.



DETROIT DARK RED

49 EXTRA EARLY EGYP-TIAN—An old well known popular variety which has long been a favorite with market gardeners. It is the earliest sort and largely used for forcing. Has very small tops and produces flat, medium size roots which are very dark red, moderately thick and distinctly flat on the bottom. Flesh is dark, purplish red, firm, crisp and tender.

50 EXTRA EARLY BASSA-NO—An early quick growing variety which is excellent for table; the leaves are especially adapted for use as greens. Roots are large, very light red and flattened; turnip shaped. Flesh pink, very sweet and tender when young. Called in some localities Sugar Beet on account of its sweet taste.

51 EDMAND'S EARLY BLOOD TURNIP—A dark red, nearly round variety which is slightly flattened. Exterior, dark red; interior, purplish red with a little zoning. Crisp, tender, sweet and one of the best for main crop, being an excellent keeper.

BEETS—TABLE VARIETIES CONT'D

(See Page 4 for Prices)

- 52 IMPROVED EARLY BLOOD TURNIP—A selected stock of this old and very popular variety. It is deep red color, zoned with lighter shade; roots round, slightly flattened and excellent for summer and autumn use.
- 53 CRIMSON GLOBE—Root of medium size, very handsome, globe shape and has a remarkably smooth surface. Both the skin and flesh are deep, rich red, fine grained, sweet and tender in all stages of growth. Small tap root; leaves are small, dark green.
- 54 DEWING'S BLOOD TURNIP—A medium early sort which is very tender and sweet and a good keeper. Roots are dark purplish red, turnip shape with a medium size tap. Tops medium size; leaf, stem and veins dark red; leaves green.
- 55 LONG SMOOTH BLOOD—A splendid late variety producing large, smooth, rather slender roots which grow largely under ground. It has few side roots and is good shape and color, exterior being dark purple, almost black, with delicate red flesh which is tender and sweet. It is an excellent sort for main crop or pickles. Produces very good crops so that it is a profitable grower for stock feeding.
- 56 SWISS CHARD—This variety is grown for its tops only which are boiled like spinach. It does not make edible roots but produces white leaves; the stalks should be cooked and served like asparagus. Makes a splendid summer vegetable and is becoming popular. Known also as the Silver or Spinach Beet.

BEETS—FOR STOCK FEEDING

(See Page 4 for Prices)

Too little attention is paid to this important crop for winter feed for stock. They yield enormously, sometimes making fifteen tons to the acre; are very nutritious, not only improving the general condition of stock but greatly increase both the quantity and quality of milk in cows. A variety of feed is always beneficial to all animals and Mangel Wurzel and Sugar Beets afford one of the best crops for this purpose as they are superior in feeding qualities to turnips and are a much larger yielding crop. All farmers and especially stock raisers should grow them extensively.

CULTURE—Sow in latter part of April, May or June at the rate of 6 lbs. to the acre, in rows 2½ to 3 ft. apart and thin to 8 inches apart. If the seed is soaked 24 hours before sowing, it germinates more quickly but it should be put in when the ground is moist. The crop is harvested before frost and packed away in barns or cellars. They can also be put into piles or ridges five or six feet high and covered with straw or litter to keep from freezing too much. When the winter weather comes on throw on a layer of four to six inches of earth. A protection of boards to shed heavy rains is also desirable.

- 57 MAMMOTH PRIZE RED MANGEL—Particularly suited to deep soils but succeeds on any medium or heavy soil. The roots are very large, uniform, and are enormously productive. Flesh is white, tinged with red. One of the best for general purposes.
- 58 GOLDEN TANKARD MANGEL—A variety which produces very large roots, oval shaped, the bottom being larger than the top. It is light grey above ground; deep orange yellow below, flesh yellow zoned with white. A splendid sort for shallow soil and produces enormously on rich ground.
- 59 YELLOW GLOBE MANGEL—Grows almost entirely above ground and especially desirable for shallow soils. Roots are globe shape, tapering to a tap root and of large size. It is easily pulled and a good variety for general purposes.
- 60 SILESIAN SUGAR—A splendid variety for stock feeding having large content of sugar which makes it of high nutritious value. Roots light bronze green above ground, greyish white below with white flesh. Can be pulled easily and a good, all around general sort.
- 61 LANE'S IMPERIAL SUGAR—A very popular variety for stock and one which will succeed well in this latitude. The roots grow to a large size and it is more like a Mangel Wurzel in character but the flesh is sweeter and more tender, being finer grained. Especially valuable for poultry.



YELLOW GLOBE MANGEL

Remember The J. Chas. McCullough Seed Company's Location:

BROCCOLI

(See Page 4 for Prices)

A vegetable resembling Cauliflower, but growing a little more coarsely and capable of withstanding extreme cold weather and adverse conditions better. It is planted similar to early Cabbage. Or for late use, sow and treat as for late Cabbage. 1 oz. for 2,500 plants.

INSECT REMEDIES-Same as for Cabbage.

62 WHITE CAPE—A large flowering variety with dense, white compact leaves of excellent quality.

63 PURPLE CAPE—Similar to the above, excepting that the flowers are reddish purple. Very much esteemed by the Europeans for table use and excellent for pickles.

BRUSSELS SPROUTS

A vegetable of the Cabbage family, which is largely used in the fall. It produces stalks about 2 feet high, which are covered with small, miniature heads, resembling small Cabbage. These are cooked and served like Cabbage and are very tender and delicious.

CULTURE-Same as for late Cabbage, but plants are set closer together.

64 PERFECTION—A semi-dwarf variety and one of the best.



BRUSSELS SPROUTS

STIMUPLANT Makes a WONDER GARDEN

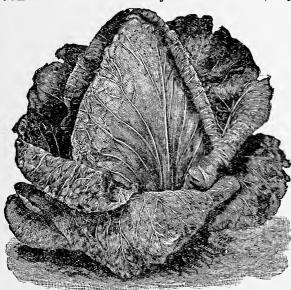
CABBAGE

STIMUPLANT Makes a WONDER GARDEN

FINEST AMERICAN STOCKS

(See Page 4 for Prices)

To raise the best crops of Cabbage, it is of the utmost importance that select seed stock be used. The varieties we list below are saved from the very best stocks and will give excellent satisfaction. We particularly call attention to Copenhagen Market, Charleston Wakefield and JMC Late Flat Dutch, as being the leading sorts of the types. All home gardens should plant some Savoy Cabbage, as it is so much more delicious in flavor than the ordinary sorts. 1 oz. for 2,500 plants.



JERSEY WAKEFIELD CABBAGE

CULTURE—For earliest plants the seed is sown in hot beds from January to March. To make the best plants, sow early and transplant to cold frames. Then at the end of March or first of April, transplant to the garden. One ounce makes about fifteen hundred good plants. Six ounces makes plants enough for one acre. For summer use sow in the open ground in April and for late use sow in May or June. There is no crop that repays so well, heavy fertilization and constant cultivation. When plants are planted in the field, apply sheep manure either in the drills or around the plant, mixing with the soil.

INSECT REMEDIES—For Flea Beetle, dust with Tobacco Dust, Slug Shot or spray with Kerosene Emulsion or Tobacco Extract. The principal enemy of Cabbage is the cabbage worm for which dust with Slug Shot or Paris Green mixed with Land Plaster at the rate of one pound of Green to 100 lbs. of Land Plaster. For cabbage lice, spray with Kerosene Emulsion or Tobacco Extract.

FUNGUS DISEASES—Cabbage turning yellow is a result of disease usually due to lack of lime in the soil. This is also true of club root. A good application of lime, about 60 to 80 bushels to the acre, is most beneficial to cabbage.

FIRST EARLY SORTS

65 EARLY JERSEY WAKEFIELD—One of the earliest and by far the surest heading of first early cabbages. Most gardeners depend upon it entirely for their extra early crop. It is exceedingly hardy, resists cold and unfavorable conditions and is the most likely to yield satisfactory results. Plants are compact, with erect conical shaped heads and few outer

leaves. Stems short; heads of medium size, very solid and of excellent quality.

66 EARLY WINNINGSTADT—One of the best conical or sharp heading sorts which is compact and of excellent quality. Quick maturing. It is the hardiest, not only as regards frost but will suffer less from excessive wet, drought, insects or disease than any other sort of its class.

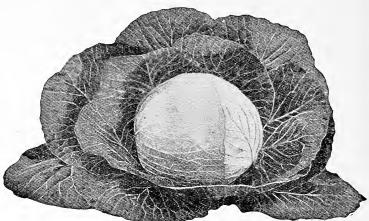
CABBAGE

FIRST EARLY SORTS—CONT'D

(See Page 4 for Prices)

67 LARGE or CHARLESTON WAKEFIELD—An improved strain of Early Jersey Wakefield in that it is much larger though a trifle later. In some localities this is planted exclusively instead of Early Jersey Wakefield as it produces the grower more money. Follows immediately after Early Jersey Wakefield and should be planted by every grower.

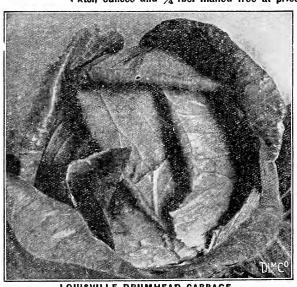
68 COPENHAGEN MARKET-The earliest round head or flat cabbage vet introduced. The heads are exceptionally large and it has a very short stem and few outer leaves - a most excellent sort for home gardens and market gardeners. On account of extreme earliness, being almost as quick maturing as Charleston Wakefield, it is destined to become one of the leading sorts grown, as a flat cabbage fills barrels or crates faster than sharp head cabbage and will yield the grower more returns. We predict for Copenhagen Market an extensive cultivation. Our stock of this is from one of the best Denmark growers.



COPENHAGEN MARKET CABBAGE

SECOND EARLY SORTS

Pkts., ounces and 1/4 lbs. mailed free at prices. Add 5c per lb. if to be sent by mail.



LOUISVILLE DRUMHEAD CABBAGE

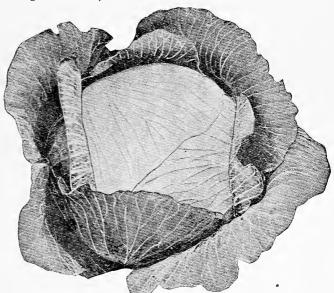
- 70 LOUISVILLE DRUMHEAD—One of the most popular of the summer varieties, producing large, round heads which are very solid. It has been largely grown throughout the Central sections, and is much esteemed by market gardeners on account of its general reliable qualities. Our stock of this is extra choice and will give the best satisfaction.
- GLORY OF ENKHUIZEN-A second early variety which is very sure heading, vigorous growth and general good qualities. The head is globular or very nearly round, very solid and of large size; has spreading outer leaves which are noticeably curved and frilled. Matures about two weeks later than Copenhagen Market and is destined to become one of the most popular of second early sorts.
- 72 ALL SEASONS-One of the largest and a thoroughly satisfactory second early sort. Plants are vigorous, sure heading; leaves large and smooth. This is a first class sort both for early and late planting and is especially adapted for kraut. It is well adapted to stand the hot sun and adverse conditions.
- 73 EARLY DWARF FLAT DUTCH-A variety which has long been popular among growers, both for home use and market. The heads are borne on short stems and are very large, solid and nearly flat on the top. Practically nearly every plant will form a good, solid head, which will mature earlier than Late Flat Dutch.
- 74 HENDERSON'S EARLY SUMMER—An excellent second early Cabbage, which is a vigorous, strong grower, producing moderately large heads. It has rather spreading outer leaves, which are somewhat frilled, and the stem rather short. The heads are round, solid and a trifle earlier than other summer sorts, and in addition will stand longer without bursting than most others.
- 75 ALLHEAD EARLY—A popular sort which has been much planted in the East and produces good, round beads, similar to Early Summer. Its growth and characteristics are also about the same.

CABBAGE—LATE SORTS

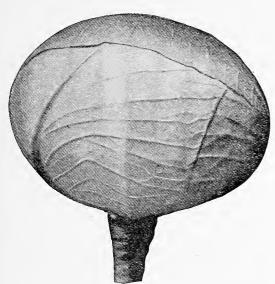
(See Page 4 for Prices)

77 MC LATE FLAT DUTCH—A very superior strain of this well known popular Cabbage, which is exceptionally reliable for main crop planting. It is short stemmed; has rather large early leaves, very showy heads and produces uniformly large, flat, deep solid heads of splendid quality. It is an excellent keeper and can be relied upon as thoroughly satisfactory.

78 LARGE LATE DRUMHEAD—One of the oldest and most popular of late sorts, producing large rounded heads. It has been grown for many years and our stock is an improved stock. The heads are somewhat more globe shaped than the Late Flat Dutch. Leaves large, loose, spreading. An excellent keeper.



ME LATE FLAT DUTCH CABBAGE



DANISH BALLHEAD CABBAGE

79 DANISH BALLHEAD OR HOLLANDER—A variety though introduced but a comparatively short time has become one of the standard sorts in the Cabbage growing district in the north. It produces very large, solid heads, which are globular in shape, has few but rather large, thick, bluish green leaves. Heads are borne on short stems, medium size, round, very solid and stands shipment better than any other late sorts. It is one of the very best keepers and is much desired for kraut. Our stock is Denmark grown and very select.

80 SUREHEAD—A good, reliable main crop Cabbage, producing very large, thick heads, somewhat flattened but very solid and uniform in size and color. The stem is short, thick. Plants vigorous and a reliable header.

81 AMERICAN PERFECTION DRUMHEAD SAVOY— Too little attention is paid to the Savoy Cabbage in this locality, as for home gardens it is unquestionably the most

desirable of all Cabbages. It is used almost entirely for late planting and attains its greatest perfection in flavor after frost, when it becomes as tender and even more delicious than Cauliflower. The heads are of medium size, borne on short stems and not as large as the ordinary Late Cabbage, hence will stand closer planting. Our stock of this is American grown and will produce uniformly large heads for this variety. We strongly recommend it to be more extensively grown both for home use and market.

82 RED-A variety used mainly for pickles and sauerkraut. It is highly esteemed.

83 Pe-Tsal—This delicious Chinese vegetable belongs to the Cabbage family and closely resembles a well grown Cos lettuce, but is heavier. We advise that the seed be sown about August 1 (not earlier). Either start in frames and transplant, or simply sow where the plants are to remain in rows, 2½ feet apart, thinning to 12 inches apart in the row. The light green, crumpled-leaved heads are very tender and of a delicious flavor.

CABBAGE PLANTS

We can supply nearby customers with Early and Late Cabbage Plants which we grow on our farms. We do not send these plants by mail.

CARROT

FINEST FRENCH STOCKS

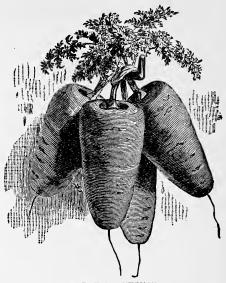
(See Page 4 for Prices)

An easily grown, useful and most healthful vegetable which should come into more extensive use. In Europe they are extremely popular, and as they add flavor to soups and meats, besides being healthful, delicious and to an extent ornamental, should be more largely used. In addition to their table uses, they make excellent pickles, and any that are left over are nutritious food for all kinds of stock and poultry.

CULTURE—Carrots do best on rich, light, loamy soil, and where the soil is shallow or stiff; select the short growing varieties, rather than the longest rooted sorts. For early crop sow in March; for main crop in April or May, in rows 18 indhes apart, cultivating and weeding as soon as the plants are up. Continue in cultivation until maturity. Cover the seed half an inch deep and see that the soil is pressed firmly; thin four to six inches apart.

One ounce sows 100 feet of row. 3 or 4 lbs. per acre. Ready for the table in 40 to 70 days from germination.

86 FRENCH FORCING—A short rooted sort which is the earliest variety in cultivation and desirable for forcing or earliest crop. Tops small, roots reddish orange, nearly round when forced and somewhat longer in shape when grown out doors. When fully matured from two to two and a half inches long.



CARROT CHANTENAY

- 88 EARLY SCARLET HORN—One of the best for early planting out of doors. Roots orange red, about 3 inches long, top shaped tapering abruptly, has small tapering roots matures in about 45 days.
- 89 OXHEART (or Guerande)—A short, thick growing variety, especially adapted to stiff or hard soils. Roots four and a half to five inches long, very thick, ending abruptly in a small, tapering root. Flesh bright orange, finest quality, an excellent sort for market home use and fine for stock feeding and poultry.
- 90 CHANTENAY—A medium early variety, orange red color, crisp and tender. Roots smooth, thick, five and a half to six inches long, uniformly stump rooted but tapering slightly. One of the best in quality and productiveness for either home garden or market and especially desirable for heavy soils, because it can be harvested easily.
- 91 HALF LONG DANVERS—A deep orange, tender variety, producing roots of medium length, six to eight inches long, tapering uniformly to a blunt point. They are very productive and well adapted to nearly all classes of soil for main crop planting.
- 92 NANTES OR HALF LONG SCARLET—A handsome variety, producing roots of medium size, slender with small necks. Roots usually five to six inches in length, sometimes longer. A good sort for moderately early planting.
- 93 IMPROVED LONG ORANGE—A well known popular sort, well adapted for loamy or deep soil, on which are produced very large crops. Roots deep orange color, usually about twelve inches long, three inches in diameter at the crown, tapering to a point. An excellent sort for table use, markets and particularly adapted for stock feeding. Roots tender and of good quality.
- 94 LARGE WHITE BELGIAN—Used entirely as a field crop for stock or poultry. Produces enormous creamy white roots three and a half to four inches at the top, tapering to a point. The carrots are among the best of root crops; and we strongly advise more extensive planting of White Belgian.

CAULIFLOWER

One of the most delicious vegetables in cultivation but on account of its difficulty in growing, not so general in the average garden as it should be. Any one, however, can be reasonably sure of success if good seed is obtained and cultural instructions given below followed.

CULTURE—For early spring or summer crop sow the seed in January or February in hot beds. When the plants have four leaves transplant to cold frames for development. Towards the end of March or early part of April, set in open field and cultivate the same as cabbage. If the soil gets very dry, water well when possible. When the plants are set in the garden, the ground should be rich; if not so, a little sheep manure or well rotted manure should be worked into the soil before the plants are set out. The plants should be thoroughly worked during the growing season and when the heads commence to form, the leaves should be tied over the flowers to protect from the sun and make them white. For fall use, sow at the same time as for late cabbage and treat in the same manner. Cauliflower will not head in very hot weather—hence, for fall use, too early sowing is not desirable.

INSECT REMEDIES—For the cabbage worm, dust with Tobacco Dust or spray with Kerosene Emulsion. For lice, spray with Kerosene Emulsion or Black leaf 40.

1/4 ounce produces about 500 plants. Three ounces will make enough plants to set one acre.

CAULIFLOWER PLANTS SUPPLIED IN SEASON. Earliest Snowball and Early Dwarf Erfurt. We do not send these plants by mail.

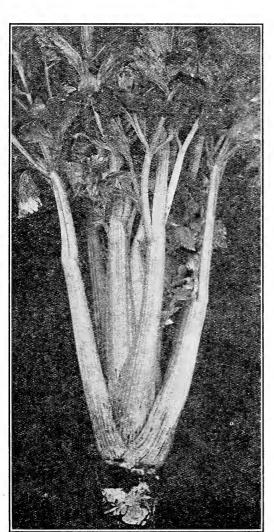
CAULIFLOWER—Cont'd

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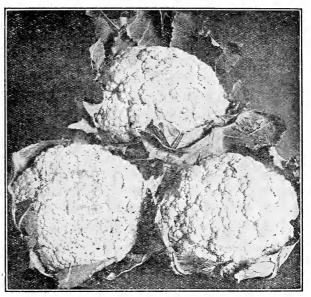
96 EARLIEST SNOWBALL—Unquestionably the earliest maturing strain of short leaf type of Cauliflower. It is well adapted for forcing or winter use for early crop and is one of the most popular of all sorts both for the market gardener and home use. The plants are compact, leaves small, and can be adapted for close planting. Produces large size flowers pure white, of most excellent quality. Our strain of this is selected Denmark grown and can be relied on as one of the most satisfactory of all.

97 EARLY DWARF ERFURT—Similar in general characteristics to Early Snowball but not quite so early and somewhat larger in growth. It is especially desirable for field planting for late crop but as a second early crop.

98 DANISH GIANT—A comparatively new variety which is more heat resisting and has been termed "Dry Weather Cauliflower". It is later maturing than either Snowball or Erfurt but as it withstands adverse weather conditions, is extremely desirable especially for late use. Produces large sized heads; is of more robust growth than other sorts.



GOLDEN SELF BLANCHING CELERY



EARLIEST SNOWBALL CAULIFLOWER

CELERY

(See Page 4 for Prices)

This is one of the most profitable crops for market gardeners where the acreage is small. It is popularly supposed to be a difficult crop to grow but this is not true if ordinary preparation and care are taken. It requires rich soil, heavy manuring, plenty of water and careful attention.

CULTURE—For earliest crop the seed should be sown in hot beds from the middle of February to the end of March. For mais crop sow in open ground March or April, according to the weather, in rows 15 inches apart. The seed is sometimes slow to germinate, and in dry and hot weather water well. Careful weeding by hand will have to be done until the young plants get started. Seed sown in beds should be transplanted. When the plants are set in the open field, trim the tops off and put in rows about 5 feet apart, setting plants 6 to 8 inches apart. Cultivate constantly during the growing season, and as the crop matures it must be earthed up or blanched. Sometimes this is done by placing two boards upright, close to the plants and filling in dirt both on the sides and in between the plants. The stalks are handled by hand but the soil must not be allowed to get in the center. Sometimes, Celery is set in beds about 4 feet wide, 6 inches between plants and 12 inches between rows, the earth being thrown out on each side of the bed. Then as it grows it is earthed in for blanching. A new method of growing Celery, which is sometimes used, is to plant a plot completely over, setting plants about 6 inches apart. This enormous growth shades the young stalks so that they turn white but it requires exceedingly rich, heavily manured soil, deep and well drained and plenty of water for irrigation. An ounce sown in about 100 feet produces 5 to 8000 plants. 4 to 6 ounces produce plants enough to set one acre, which mature in 120 to 150 days according to the kind and location.

100 IMPROVED WHITE PLUME—An extra early and very handsome sort which is very popular with market gardeners, especially for very early crop. Leaves are light, bright green at the base, shading nearly white at the tip. As plants mature the inner stem and leaves turn white and consequently require less earthing and blanching before they are in condition to use or market. While it is very attractive and the earliest sort, its quality is not nearly so good as that of most other varieties, being somewhat stringy and not so tender.

101 GOLDEN SELF BLANCHING—This is not only a very early variety but one of the best for home use or market. It is not quite so early as White Plume but so much finer quality that it is generally preferred as a main crop sort. Plants are medium size, compact and stocky with yellowish green foliage. As they mature the inner stem turns a beautiful yellow golden color and blanching is early accomplished. Being of handsome color, very crisp, tender, free from stringiness and of fine flavor, it is the leading sort grown.

CELERY-Cont'd

(See Page 4 for Prices)

102 GIANT PASCAL—A green leafed variety of the Golden Self Blanching type, from which it was developed, and one of the best for fall and early winter use. It blanches a beautiful yellowish white, is very solid and crisp and has a fine nutty flavor. Stalks of medium height, thick, solid, flattening towards the base and one of the best for main or late planting.

103 DWARF GOLDEN HEART—A well known variety which has long been popular both for market gardening and home uses. It is of medium height, stalks moderately large which when maturing turn a beautiful golden yellow color. More easily handled and brought to perfection than the Golden Self Blanching.

105 EASY BLANCHING—Easiest and quickest to blanch; long keeping. A valuable celery of recent introduction and is now extensively grown by the most progressive celery growers throughout the United States. The stalks are stocky in growth and of medium height and are the easiest and quickest to blanch and keep better in the trench than other sorts. The tender, brittle, sweet, nutty flavored stalks are attractive in appearance. Ready for the table or market in about 115 days. Grows equally well on muck or upland.

107 CELERIAC OR TURNIP ROOTED CELERY—Very popular with the French and Germans and is used for its roots only which, have a fine sweet, nutty celery taste. It is used either boiled or raw, has a delightful flavor and can be used in soups, salads or as a table vegetable. Culture about the same as for Celery.

CELERY SEED for flavoring. Per lb., 25c; 5 lbs., \$1.20.

CELERY PLANTS supplied in season. (June, July, August.) Varieties, White Plume, Golden Heart, and Golden Self Blancing. We do not send these plants by mail.

STIMUPLANT Makes a WONDER GARDEN

CHICORY

(See Page 4 for Prices)

108 WITLOOF OR FRENCH ENDIVE—Seed should be sown in the open ground not later than June in drills twelve to eighteen inches apart, thinning plants so they will stand about three inches apart. The plant forms long, parsnip-shaped roots, which should be lifted in the fall, and after cutting off the leaves store in soil in a cool place until wanted for forcing. To force, plant closely in trenches deep enough to permit covering the roots with soil 8 inches deep. If quicker growth is desired mulch with manure 2 feet deep. Requires four to five weeks to force. The blanched head is the edible portion and should be cut with a portion of the neck attached to it. The principle use of Witloof is as a winter salad, and it is most delicious served with French dressing and eaten like Cos Lettuce.



CORN—GARDEN SORTS

(See Page 5 for Prices)

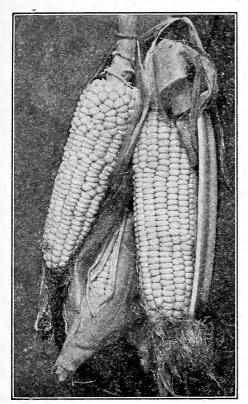
Packets and half pints postage paid. For pints remit 5c, for quarts 10c, if to be sent by mail.

One pint plants about 200 hills, six to eight quarts to an acre. For succession planting about every two weeks from April to end of July; ready for the table 60 to 90 days from planting.

CULTURE—Extra early dent corn can be planted at the end of March or early in April. Sugar corns are more tender and should not be planted until warm weather is settled and ground becomes warm. Cultivate frequently and keep the ground free of weeds. A handful of our Bacterized Humus dropped in each hill will increase the yield.

CORN—GARDEN SORTS

(See Page 5 for Prices)



ADAMS EXTRA EARLY CORN

EARLY DENT GARDEN CORNS.

These are not sugar corns but valuable for their hardiness as they can be planted earlier and will mature quicker than sugar corns—hence, usually very profitable for market gardeners.

110 EXTRA EARLY ADAMS—The earliest variety and extensively used for first early table corn in the South. Staiks about 4 ft. high with few leaves and without suckers. Ear. short, very full, 12 to 14 rows, kernels white and smooth; an extremely hardy sort; can be planted close together and usually popular.

111 EARLY ADAMS—A little larger and later sort of about the same characteristics as Extra Early Adams. Stalks about 6 ft. high, ears 12 to 14 rows and a good variety for second early or very late planting.

YELLOW SWEET CORN

112 JOHN SELECTED NORTHERN GROWN GOLDEN

BANTAM—The most popular variety of yellow sweet corn ever offered; also one of the earliest and hardiest. It can be planted safely earlier than other varieties. The plants rarely grow over $3\frac{1}{2}$ feet in height, and usually bear at least two ears, 5 or 6 inches long, on each stalk. Many people assert that Golden Bantam is the sweetest of all corns; its plump, rich, cream-yellow kernels are tender, milky, and delicious. All our Golden Bantam seed is Northern grown, making it especially valuable for early planting.

113 GOLDEN CREAM-A cross of Country Gentleman and Golden Bantam, taking on the character of the former variety, except in color. The ears are ready for use at an early season; grains are long and pointed, rich cream color when ready, but turn to light golden-yellow when cooked, making an attractive appearance on the table. The quality is very fine, being remarkably sweet and tender. Stalks are brownish-red, and make a healthy, rapid growth, producing from 2 to 4 ears each.

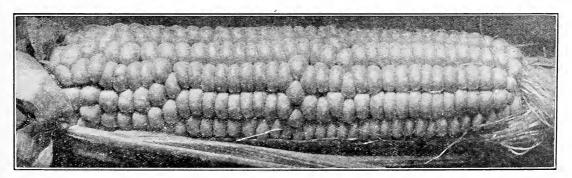
114 BANTAM EVERGREEN-A cross between Golden Bantam and Stowell's Evergreen and is a most excellent sort of fine quality. The ears average 8 inches long and are 12-rowed, the grain is rather broad and deep and of a rich golden-yellow color.

EARLY SWEET CORN

Sweet or Sugar Corns are so much superior for table use to the ordinary dent or field varieties that they should be planted exclusively for this purpose except for very earliest crops. They are very prolific, producing in many cases 3 to 4 good ears to the stalk. As a market crop, corn is very prolifable, as an acre produces from 800 to a 1000 dozen ears which sell readily at good prices.

115 PREMO-Premo can be planted fully as early as the Adams, for the young plants withstand slight frosts, while the other varieties are tender and the seeds will rot if planted before the soil becomes warm. The stalks grow about five feet high, and are very vigorous, generally bearing two well-developed ears to the stalk.

116 EARLY EVERGREEN-An early strain of Evergreen of great value. This variety resembles the Stowell's Evergreen, but is ready for use much earlier, and remains in good condition equally as long. The ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep, sweet grains.



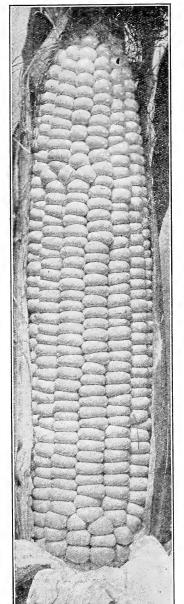
CORN—SWEET OR SUGAR—Cont'd

(See Page 5 for Prices)

BLACK MEXICAN—For home use we consider this one of the best second-early sorts where tenderness and sweetness are the qualities most desired. The stalks grow about 6½ feet high, producing ears usually 8 inches long and 8-rowed. The dry grain is dark bluish black. The ripe Corn on the cob is also bluish black but, if used young, this Corn cooks remarkably white. This is an interesting variety.

118 MAMMOTH WHITE CORY—One of the best, extra early corns producing very large ears for so early a variety. Stalks about 4 ft. high, generally bearing 2 large finely shaped ears which become fit for use very early. Grains large, broad, very white, of fine quality and usually 12 rows to the cob. A splendid sort for private gardens and probably the most profitable for early market gardens.

119 **EARLY MAMMOTH**—Resembling the well known Late Mammoth in general characteristics but 10 days to two weeks earlier and slightly smaller in size.



weeks earlier and slightly smaller in size.

120 HOWLING MOB—A variety a little later than Mammoth White Cory. Ears measure seven to nine inches in length, twelve to fourteen rows; white grains. Stalks strong, of vigorous growth, four and a half to five feet in height, have abundant foliage and usually produce two good ears to the stalk.

121 **EARLY MINNESOTA**—Not quite so early as Mammoth White Cory but one of the best second-early sorts for market and home gardens. Stalks about 6 ft. high, bearing 2 ears about 8 inches long, 8-rowed, broad kernels which do not shrink much in drying.

122 KENDEL'S EARLY GIANT—A remarkably large eared second-early sort which is very popular in some sections. Ears are 8 to 9 inches long, 12-row; grains broad, rather shallow but the quality is good.

123 CROSBY'S EARLY—A second-early sort, having twelve rows; grains pure white, deep, very sweet and tender. More largely used for canning than any other early sort.

SWEET CORN Main Crop

124 **COUNTRY GENTLEMAN** — Probably the most popular of all sorts for home gardens on account of its sweetness, tenderness and delicious flavor. Ears 7 to 8 inches long, round, medium size. Grains zigzag or staggered, small in size but set close on the cob and very deep.

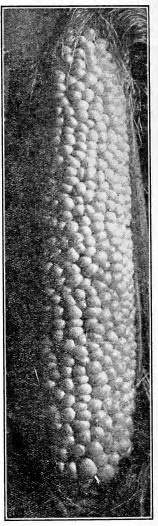
125 STOWELL'S EVERGREEN—One of the standard main crop sorts which has long been popular with commercial growers, canners and one of the best for home gardens. It is

hardy, thrifty, productive, very tender and sugary and remains in edible state longer than most other sorts. Ears 7 to 8 inches long, having 14 to 20 rows; of very deep grain. Stalks 8 to 9 ft. high, bearing 2 or 3 large ears.

126 **ZIG-ZAG EVERGREEN**—A development of the Stowell's Evergreen which has become very popular. The rows instead of being straight are irregular; the grains set very close on the cob. Ears are 8 inches long, large grains, very deep, sugary, tender and of fine flavor. This is becoming a very popular sort and in many sections is superseding the well-known Stowell's Evergreen.

127 **LATE MAMMOTH**—The largest and latest of all Sugar Corns, producing ears which are about 11 inches long, 16 to 18-rowed. Grains are broad, somewhat short, but of good flavor, sweet, tender and delicious. One of the best sorts for late crop, especially for market.

128 CLUB ZIG-ZAG EVERGREEN—A late variety of Zig-Zag Evergreen Corn, the ear generally being twice the size in diameter of any other sort and of a fine, sweet flavor.



COUNTRY GENTLEMAN CORN

STOWELL'S EVERGREEN CORN

POP CORN A very profitable crop in many sections and grown in enormous quantities. It is popularly "the boys' crop" and all gardens should have a small quantity.

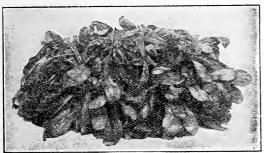
129 RICE—A well known white sort with pointed grains; very highly prized for popping and most satisfactory.

130 WHITE PEARL—A smooth grained sort making fair sized ears; grains pearly white reliable for popping.

131 QUEEN'S GOLDEN—A large eared yellow sort having grains about twice as large as the white sorts. It pops perfectly white and is tender.

CORN SALAD An excellent salad for winter and spring. The seed is sown in August or September, in drills one foot apart. Press on the soil to make it firm and it will germinate better. As freezing weather approaches cover with straw or coarse litter. Seed can also be sown very early in the spring if on rich soil.

132 LARGE SEEDED—Round leaved, the best variety.



CORN SALAD

CRESS-Water and Garden

133 CURLED CRESS—Leaves of this are much frilled and curled. Used for garnishing and with lettuce as it gives a pungent taste which makes an agreeable addition. Plants are of rapid growth and attain a height of about one foot.

134 WATER CRESS—This is a well known cress, used so extensively for garnishing and as a salad. It will succeed anywhere that the ground is moist; is especially valuable around springs and along small streams. After once established it will need no further attention. When gathered it should be cut—not broken off. In summer it is best to cut closely, the oftener the better.

CUCUMBER

(See Page 5 for Prices)

Usually a profitable crop for market, as if not salable for table uses. finds a fair market with pickle factories. All home gardens should grow Cucumbers, as they are useful as a salad or for pickling. Cucumbers fresh from the garden are much superior to those purchased, which are often wilted.

One ounce plants 50 hills; two pounds to one acre. Plant in April or May for early crop; ready for the table 50 to 75 days from planting.

CULTURE—Rich soil or one containing plenty of well rotted manure is best; hence, hills are usually made about 4 feet apart using manure or sheep manure well mixed with the soil. For very earliest crop the seed may be started in hot beds, in pots, small paper boxes, or pieces of sod, grass side down, so that they can be readily transplanted to open ground without disturbing the roots. For earliest crop outdoors plant 8 to 10 seeds in hills or drills 4 feet apart. On cold nights or threatened frost they can be protected by pieces of paper weighted with earth; after danger of frost and destruction by insects, thin the plants to about 4 to the hill. For late crop plant from the end of May until July. Cultivate occasionally keeping the grass and weeds out, and when the fruit is ready for use, pick whether wanted or not, as it will extend the life and productiveness of the vines.

INSECT REMEDIES—For the Yellow Striped Beetle, dust with Tobacco Dust or Slug Shot. Sometimes covering with dry earth will be beneficial. For the Cucumber Borer which bores into the cucumber, hand-picking and destroying the infested cucumbers is the only remedy.

135 IMPROVED EARLY WHITE SPINE—One of the best sorts for table use and probably the most popular sort grown by market gardeners and truckers. The vines are vigorous, producing fruit early and abundantly. Fruits are uniformly straight, about 8 inches long, vivid green color changing to and streaked a whitish green at the tip.

136 IMPROVED LONG GREEN—One of the most popular sorts for home gardens and in country districts for home markets. Fruits are very long, often 12 inches, slender and uniformly dark green color. It is rather late maturing. The vines are very vigorous and fairly productive. The matured fruits are excellent and tender for table use and both large and small can be used for pickling.

137 DAVIS PERFECT—A development by crossing the Improved Long Green with an English Frame Variety. It is dark, rich green color, slightly tipped with white at the end; has very few seeds and excellent for slicing. Fruits are often 12 inches long, very slim and showy. Particularly fine for home gardens.

138 EARLY FRAME—A well known short, green variety, producing quite abundantly, uniformly straight, moderate sized fruit. Valuable for very early planting or for late use for pickling as it is more prolific than the large fruited sorts.



IMPROVED WHITE SPINE CUCUMBER

CUCUMBER—Cont'd

(See Page 5 for Prices)

- 140 EARLY FORTUNE—The finest type of White Spine yet produced. Early and very productive; fruits grow 9 inches long, slightly tapering, flesh white, firm and crisp with very few seeds; color dark green. Quality is excellent, either when sliced for use at the table, or for making pickles.
- 141 JERSEY PICKLING—A variety shorter than Long Green, slender and produces very abundantly. Vines are vigorous and productive. A very popular main crop sort for market and commercial uses.
- 142 GREEN PROLIFIC—This variety has long been popular with commercial growers for pickling. The vines are healthy, vigorous and very productive. Fruits medium length, straight, smooth and vivid green and uniform.
- 143 NICHOL'S MEDIUM GREEN—A variety intermediate in length between the White Spine and Long Green, producing straight, medium sized cylindrical fruits of dark green color, which are most excellent for slicing and extremely popular for pickling. Vines vigorous, productive. A very profitable variety for canners and commercial growers for late crop.
- 144 EARLY GREEN CLUSTER—Short and prickly; bearing in clusters; prolific; fine for bottling.
- 145 COOL AND CRISP—The beautiful green color is all that can be desired. Excellent for pickling or slicing.
- 146 JAPANESE CLIMBING—A variety having very strong vines which throw out numerous tendrils and can be trained upon trellises or poles. The skin is smooth, dark green, turning to brown and netted when ripe. The flesh is pure white, crisp, and of mild flavor. Fruits 12 to 16 inches long. It is an abundant producer of long, straight handsome large fruits.
- 147 GHERKIN OR BURR CUCUMBER—Grown exclusively for pickles and especially for mangoes and sweet pickles. The fruits are small, oval, prickly and produced abundantly. Vines are longer and more vigorous than cucumber vines—hence, require a little more space. The seed is distinctly smaller than other Cucumbers.

EGG PLANT

(See Page 5 for Prices)

A well known popular vegetable which produces large purple fruits. It is served mostly fried. Seed germinates slowly and should be started in hot bed.

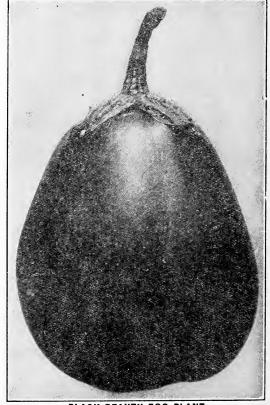
One ounce produces 1500 plants. Four ounces will produce enough to set one acre. Ready for table in 120 days from sowing.

CULTURE—Sow in February or March in warm hot beds. When the plants have two rough leaves, transplant to 3 or 4 inches apart or into small pots; after all danger of frost is past, say about the middle or end of May, transplant to the garden, setting plants about three feet apart each way. It is desirable to protect the young plants from very hot sun at first.

INSECT REMEDIES—For the potato bug or squash bug use Slug Shot or Paris Green mixed with flour or Land Plaster. (See under heading of Cabbage.)

- 148 BLACK BEAUTY—Ten days to two weeks earlier than New York Improved Purple. Fruits slightly longer and darker than this variety, being rich dark purple, large and symmetrical. It is very desirable for market as it holds its color a long time. It is entirely free from spines; splendid for early crop or very late planting.
- 149 NEW YORK IMPROVED PURPLE (Spineless)— This has long been a general favorite both for market gardeners and home use. It is the largest variety in cultivation and one of the best. The plant is robust, usually producing 4 to 6 large, oval fruits of splendid, dark purple color.

PLANTS, per doz. 40c; per 100 \$3.00. Ready in May. We do not send these plants by mail.



BLACK BEAUTY EGG PLANT

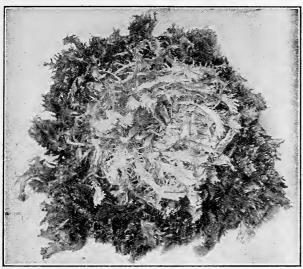
ENDIVE

(See Page 5 for Prices)

One of the best salads for fall and winter use and sometimes used for greens, flavoring soups and stews. It may be grown at any season but is more generally planted for fall.

CULTURE—For early use, sow about April 15th; for late use, sow in August, in drills 18 inches apart and when large enough thin out to about one foot apart. When nearly grown tie the outer leaves together over the center in order to blanch up the heart. By covering fresh plants every few days a succession may be kept up. 1/2-oz. to 100 ft. row.

150 GREEN CURLED—One of the hardiest and best varieties for general use. It has deep green leaves, beautifully cut and curled and is early blanched; is very crisp, tender and of fine flavor.



GREEN CURLED ENDIVE

151 BROAD LEAF BATAVIAN (Escarolle).—A variety having broad, more or less twisted, waved, bright green leaves with thick white mid-ribs. It is much larger in growth than other sorts and has a flavor all its own. The inner leaves form a very solid, clustering head; are blanched a beautiful deep, creamy white; crisp, tender and of fine flavor. Very highly esteemed by the French and popular wherever used.

152 MOSS CURLED—A compact growing variety forming large dense clusters, finely divided, medium green leaves. When properly blanched, is rich creamy white and tender. An ornamental variety for salads.

FRENCH ENDIVE—(Witloof Chicory.) See Chicory.

GARLIC

A bulbous rooted plant of the Onion family, with a strong penetrating odor; very desirable for flavoring both cooked vegetables, soups, etc., as well as salads. Garlic does not have seed and is planted from small bulbs only. Plant same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the row, covering 2 inches deep. When the leaves

the row, covering 2 inches deep. When the leaves turn yellow, take up the bulbs, dry in the shade and store in a dry loft as you would onions. Bulbs, 1/2 lb., 15c; lb., 40c.

HERBS

(See Page 5 for Prices)

Most of these should be sown in April, and can be transplanted when large enough. The seed is small and should be sown in drills and firmed down. Keep clean of weeds. Most of them are to be cut when in bloom, wilted in the sun, and dried thoroughly in the shade.

153 ANISE—A hardy Annual, grown principally for its aromatic seeds, which are used in cordials and some-times for medicine.

154 BASIL (Sweet)—A hardy aromatic Annual used for flavoring soups and sauces, to which it gives a strong flavor.

155 CARAWAY—Cultivated principally for its seeds, which are used for flavoring bread, cakes and confectionery. The leaves are sometimes used in soups and for liquids. Plants grow about 2½ feet high. Does not seed until the second year.

Caraway Seed for Flavoring, 1 lb., 45c; 5 lbs., \$2.00.

Celery Seed for Flavoring, 1 lb., 25c; 5 lbs., \$1.20.

156 CORIANDER—The seeds are used mainly for flavoring confectionery, per lb., 20c.

157 DILL—A popular aromatic annual Herb which is largely used for seasoning pickles, sauces, soups, etc.

158 FENNEL (Sweet)—A hardy Perennial, the seeds of which are used for flavoring sauces, especially for fish; as well as confectionery and cakes, per lb., 30c.

159 LAVENDER—A hardy Perennial growing about 2 ft. high. The flowers of which are used for perfumes. It is also distilled for making lavender water.

160 MARJORAM (Sweet)—An Annual used mainly for seasoning.

161 SAGE—One of the most extensively used plants for seasoning. It is a hardy Perennial growing about 15 to 18 inches high.

162 SAVORY (Summer)—A hardy aromatic Annual, largely used for seasoning, especially a dressing for soups and sausage.

163 THYME—A hardy Perennial, plants fragrant and spicy. Used for flavoring; as a tonic, also as a dressing for fresh bruises.

Blue Poppy for Flavoring, per lb., 25c; 5 lbs., \$1.00.

Yellow Mustard for Flavoring, per lb., 20c.

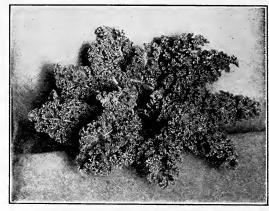
KALE

(See Page 5 for Prices)

A popular crop for fall, winter and spring use as greens. In the South it is boiled with bacon. Excellent for garnishing. In addition to its table uses it is a splendid soil improver and very nutritious as a grazing crop for cattle, hogs or sheep.

CULTURE—In this section it is usually sown broadcast from the middle of August to the middle of October at the rate of 3 to 4 pounds to the acre. Scotch kale is sown earlier and when very early is usually sown in drills. In the spring seed can be sown in February March and April. Spring sown Kale requires 5 to 6 pounds to the acre and Smooth Kale should have 6 to 8 pounds to the acre. The ground should be prepared cleanly and harrowed as finely as possible. Seed can be covered with a smoothing harrow or roller but not covered too deep.

164 DWARF GREEN CURLED—An old standard winter variety in this section. Leaves are light green in color, tinged with purple, beautifully curled, and when properly cooked make a very palatable dish of greens. In this locality, will stand the winter.

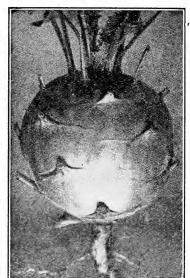


DWARF GERMAN CURLED KALE

165 DWARF CURLED SIBERIAN—A vigorous growing sort of spreading habit, its green foliage having a distinctive bluish tinge or bloom. Very hardy and a favorite in many sections both for greens and extensively grown for forage.

166 DWARF GREEN CURLED SCOTCH (OR NORFOLK)—A finely curled, spreading, low growing variety, which is very popular around many trucking centers, especially in the East. The leaves are attractive, bright green color and beautifully curled which make it excellent for garnishing. It must be sown earlier than other sorts; usually from July until end of August or can be sown in March. Can be sown either in drills or broadcast.

167 TALL SCOTCH—Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost.



WHITE VIENNA KOHL-RABI

KOHL-RABI

(See Page 5 for Prices)

A vegetable intermediate between a Cabbage and a Turnip which combines the flavor of both. It forms a turnip-shaped bulb above ground which is boiled and served like Turnips. If used when young is tender and a very desirable vegetable.

CULTURE—For early use sow in hot beads and transplant. Out of doors sow in open ground the first part of April in rows 18 inches apart; thin out or transplante to 6 inches apart in the row. Cultivate same as Cabbage. It can also be sown the latter part of June or in July for fall use. One ounce will sow 300 feet of drill.

168 EARLY PURPLE VIENNA—Very early with small tops, bulbs good size. A variety of good quality.

169 EARLY WHITE VIENNA—An excellent sort for general use, has white tender flesh of pleasant flavor.



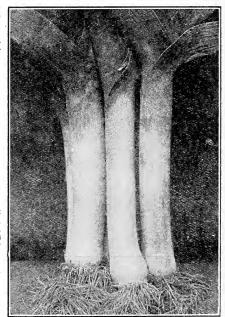
(See Page 5 for Prices)

Generally considered superior to onions for flavoring. Leaves flat, stems very large, cylindrical and bulbous.

CULTURE—Sow as early in the spring as the ground will permit, in rows 12 to 15 inches apart, covering about ½ inch deep. Thin out to 6 inches apart and draw earth to them in cultivating. Leek can be transplanted like onions if desired. For very white and tender Leek transplant when six inches high, setting 4 inches apart in trenches about 2 feet apart and earth like celery. One ounce will sow about 100 feet of drill.

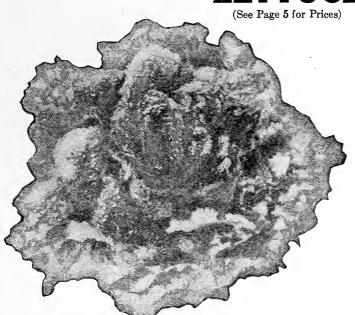
170 LARGE FLAG—A hardy variety of good quality which is popular in all sections.

171 LARGE ROUEN—Stems large but comparatively short. Leaves very broad covered with a whitish bloom. This variety remains in condition for use a long time.



LARGE FLAG LEEK

LETTUCE



BLACK SEEDED SIMPSON LETTUCE

A popular crop in all small gardens and one of the most profitable for market gardeners both for winter forcing and for summer growing providing the weather is seasonable or irrigation can be done.

CULTURE——For Winter Forcing.—Sow from September to February; the curled varieties about every four weeks apart or the heading sorts about six weeks apart. As one crop is cut, another should be ready for planting.

Out of doors—For early spring crop plants can be started in hot beds and transplanted to rows one foot apart, setting the plants 6 to 8 inches apart in the row. Later sow seed in rows 12 to 15 inches apart and thin out or transplant if desired leaving the heads to stand 6 to 8 inches apart in the row. A succession of varieties should be kept up from early summer until late fall.

One ounce sows 300 feet of drill. Three pounds one acre. One ounce produces about 4000 plants; an acre requires about 50,000 plants set 8 x 15 inches.

INSECT REMEDIES—For the green lettuce worm and green measuring worm, which eat the leaves, spray with a solution of Hellebore in water, at the rate of 1 lb. of Hellebore to 15 or 20 gallons of water. For green lice, spray with a solution of Tobacco Extract. In green houses fumigation with Nico-Fume Liquid or Tobacco stems, will be effective. In frames, fumigation with Nico-Fume Paper is best. Tobacco stems or Tobacco dust applied on the soil or around the beds, is an effectual preventative of green lice.

CURLED OR LOOSE-HEAD VARIETIES

172 GRAND RAPIDS—The most popular variety for green house forcing, especially for shipping. It is of quick growth, hardy and not liable to rot; remains in good condition several days after being fit to cut. Plants are upright and uniform; leaves finely crimpled at the edges. It is the heaviest loose-headed sort, will stand shipping better and is a very attractive variety.

173 BLACK SEEDED SIMPSON—The best sort for nearby markets and for home gardens on account of its superior quality. It forms a large, loose head, very bright green, nearly white, and is exceedingly tender. Is largely used for forcing under glass and a superior sort for earliest crop.

174 EARLY CURLED SIMPSON (White Seeded)—Makes a large, loose curled head similar to Black Seeded Simpson. Particularly adapted for sowing thickly and cutting when the plants are young. Leaves light green, slightly frilled, much blistered, crisp, sweet and tender.

175 EARLY CURLED SILESIAN—An old and very popular variety which is probably the earliest and quickest sort grown. Plants loose, not quite so large as Black Seeded Simpson. Popular for outside.

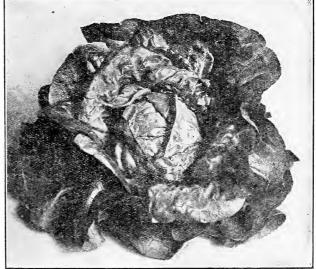
176 EARLY PRIZE HEAD—A large clustering, non-heading sort, most excellent for home gardens as it is very early. It is too tender for shipping. Leaves are finely curled and crumpled, bright green tinged with brownish red; very crisp and tender.

Cabbage or Heading Varieties

177 MAY KING—An early, fine variety for spring and fall use in the open garden, also for growing in cold frames during the winter months. The heads are 6 to 7 inches in diameter, with light green outer leaves. The inner leaves are blanched to a golden yellow.

178 ICEBERG—A beautiful lettuce, with large curly leaves of a bright, light green, with a very slight reddish tint at the edges. Handsome heads, unusually solid because of the natural tendency of the large, strong leaves to turn in, which also causes thorough blanching. Crisp, tender and fine flavor.

179 TOP NOTCH—A distinctly improved variety of Big Boston and one of the very best for forcing or out of door culture. Under favorable conditions the heads will measure 10 to 12 inches across; are bright, lively green color without the brownish marking of Big Boston. The heart and inner leaves are pure white. It is deliciously flavored, very tender, of splendid quality and highly recommended for extensive market growing or home use as it will be found thoroughly reliable in heading and the most profitable of this type.



TOP NOTCH LETTUCE

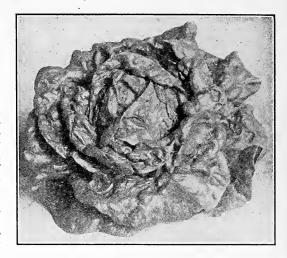
LETTUCE

CABBAGE OR HEADING SORTS—CONT'D

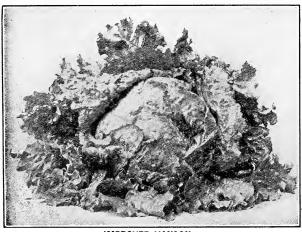
(See Page 5 for Prices)

180 BIG BOSTON—This has long been a favorite sort with market gardeners and truck growers and in some sections is planted almost exclusively. It forms a large compact head, forces well in frames and thoroughly satisfactory for outdoor crops in the spring or very late head crop in the fall. Leaves are broad, comparatively smooth, color bright light green. The heads slightly tinged with reddish brown.

181 CALIFORNIA CREAM BUTTER—A splendid sort for second early crop which has glossy, deep green leaves, the outer ones slightly splashed with brown. It forms a large, very solid head, rich light yellow in color, very tender and buttery. A reliable sort for market or home gardens.



CALIFORNIA CREAM BUTTER



IMPROVED HANSON

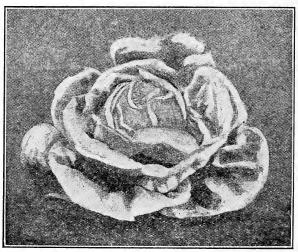
183 IMPROVED HANSON—A splendid summer heading sort and probably the most popular of its class in this section. The plant is compact, forming a large cabbage like head which remains in good condition a long time. The outer leaves are yellowishgreen, somewhat crumpled with a large distinctive mid-rib. The inner leaves white, sweet and tender. This variety is a little coarse in quality but on account of its large size and general reliable summer heading qualities, is profitable and desirable for summer use.

184 SALAMANDER—A splendid summer sort producing large, compact, light green heads of excellent quality. The leaves are broad, thick, somewhat crumpled, closely overlapped so that the inner ones are finely bleached. Withstands hot weather remarkably well. Is of fine quality and one of the best summer sorts for home use.

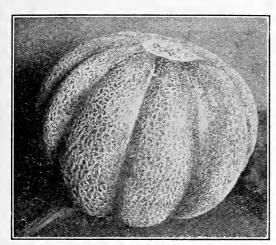
186 NEW YORK LETTUCE—Blanches beautifully. Crisp, tender and free from bitterness.

It produces immense heads, often 15 and 16 inches across, and weighing enormously. The interior is beautifully blanched, creamy-white, crisp, tender and delicious, being absolutely free from any trace of bitterness. It is a very large, robust growing variety, rooting deeply, resisting hot, dry weather, very slow to run to seed and a sure header under most trying conditions.

187 COS LETTUCE (ROMAINE)—A distinct variety, having long spoon-like leaves, which are folded into a conical or sugarloaf head. Very much esteemed for salads, especially in Europe. Seed should be sown out doors very early, thinning out to three or four inches apart. When near maturity tie the leaves over the head for blanching.



BIG BOSTON



HENDERSON'S BUSH MUSK MELON

MUSK MELON OR CANTALOUPE

(See Page 5 for Prices)

These can be successfully grown in nearly all gardens. If the soil is very rich and heavy, Salmon-Fleshed sorts will produce the best. If light or loamy, Green-fleshed sorts will succeed admirably. Among green-fleshed sorts the "Queen of Gems" is one of the earliest and best. In salmon flesh sorts, "Burrell's Gem," "Paul Rose" are among the best.

One ounce plants 50 hills; two pounds to one acre. Plant in May for early crop; in June for late crop.

CULTURE—Seed is planted in hills 6 ft. apart, putting 10 to 12 seeds to the hill and covering one inch deep. If land is not rich, use well rotted manure or a little sheep manure mixed with the soil. When danger of insects is over, thin out to 4 plants to the hill.

INSECT REMEDIES—For the striped beetle which is troublesome, dust plants lightly with Slug Shot, air-slacked lime, tobacco dust or even dry road dust. If the plants get too rank, pinch off the end of the vines after they have set fruits. Cultivate shallow and often. Green flesh melons will become more netted if about 200 lbs. of salt are broadeasted to the acre.

Packets, ounces and 1/4 lb., mailed free; for 1/2 lb., remit 3c, for pound 5c extra if to be sent by mall.

GREEN FLESHED VARIETIES

188 HONEY DEW—Its name has been well chosen, as it is about as sweet as Honey. The average size is about 6 inches in diameter, and they weigh five to six pounds. The skin is smooth with little netting, and of creamy yellow when ripe. The flesh is a beautiful green next to the outside rind shading to light green at the center. It is very thick, melting, fine grained and can be eaten almost to the rind, and the seed cavity is quite small.

190 QUEEN OF GEMS—This is undoubtedly one of the best of the green fleshed types on account of its extreme earliness, large size, extra fine quality and large yields. It is two weeks earlier than the Rocky Ford and more productive, a little more netted and somewhat larger. It is almost entirely rust and blight proof, very productive and the fruits are sweet and luscious.

very productive and the fruits are sweet and luscious. Fruits are oval, ribbed, thick green flesh tinged with yellow. We cannot recommend this too highly for market or family use.

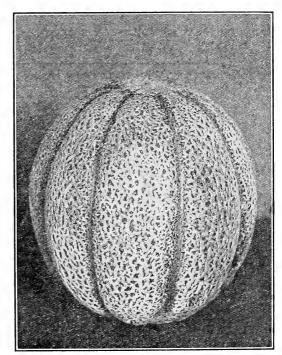
191 ROCKY FORD—A well known small variety which has become famous. It is oval, with green flesh, very sweet and highly flavored. Vines vigorous and productive.

192 **NETTED GEM**—A variety which has been introduced nearly 30 years and still retains its great popularity. The fruits are medium size, oblong, ribbed, netted, very firm, solid, and stand shipping remarkably well. Vines vigorous and productive.

193 GREEN NUTMEG (or Jenny Lind)—Fruits small somewhat flattened, deeply ribbed and netted. Flesh green, exceedingly sweet. An extra early variety and on account of its size, a desirable table melon. Vines are small but vigorous and productive.

194 ACME OR BALTIMORE MARKET—Similar in shape to Rocky Ford but larger. Flesh is thick, green, well flavored and sweet. Very productive and a sure cropper. One of the most desirable of the large or medium size melons.

195 EXTRA EARLY HACKENSACK—Two weeks earlier than the Large Hackensack and produces medium sized fruit, somewhat flattened, evenly deep ribs with coarse netting. The flesh is green, slightly tinged with yellow, juicy and sweet.



OUEEN OF GEMS

MUSK MELON or CANTALOUPE

GREEN FLESHED VARIETIES-Cont'd

(See Page 5 for Prices)

196 LARGE HACKENSACK (or Turk's Cap)—An old and well known sort which produces very large green-fleshed fruits which are nearly round and flattened. Flesh, green, thick, juicy and sweet.

SALMON FLESHED VARIETIES

198 POLLOCK'S No. 10-25—Best described as a salmon tinted Rocky Ford, being identical in every way except color of flesh, which is a light salmon in color at the center, shading into a light green midway to the rind. It is rapidly superseding the green fleshed variety in the large melon growing districts of the South and West.

199 BURRELL'S GEM—Similar in size and shape to the well known Rocky Ford. Has thick, deep salmon flesh, tender, juicy and sweet. One of the most popular sorts for shipping and a favorite with large growers as it produces well, being exceedingly vigorous and productive.

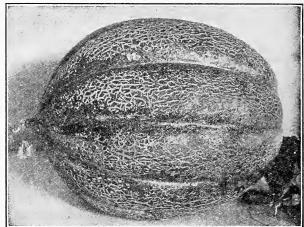
200 EMERALD GEM—An early yellow fleshed melon of small to medium size which is one of the very best for home gardens. Vines vigorous and productive. Fruits globe shaped, flattened, somewhat irregularly ribbed and very slightly netted. Outer skin dark green when young, becoming slightly tinged with yellow. Flesh, deep salmon yellow, thick, melting and very highly flavored.

201 TIP TOP—A popular sort with market gardeners, producing very large sized melons, ribbed but almost smooth skin. Flesh salmon, very deep, a little coarse but exceedingly sweet and luscious. Especially desirable for very rich soil and one of the most profitable for market

202 PAUL ROSE (Petoskey)—A yellow fleshy sort of excellent quality. Fruits are oval, slightly ribbed and densely netted, somewhat resembling Netted Gem but larger. Flesh is orange yellow, very thick, firm and sweet and highly flavored. Vines vigorous and productive.

203 OSAGE OR MILLER'S CREAM—A medium salmon fleshed melon of excellent quality. Fruits are oval, dark green, slightly ribbed, tinged with grey. Flesh salmon color, thick and highly flavored. A splendid sort for late or main crop, especially for market.

204 BANANA—A long, smooth skinned variety, growing something in the shape of long squash. Fruit about 12 inches long, salmon flesh, which is very sweet, luscious and tender. Much esteemed in some localities.



PAUL ROSE CANTALOUPE

WATERMELON

(See Page 5 for Prices)

Watermelons do best on old, rich soil, which is not too freshly manured, hence when making the hills, well retted manure should be used, and it is better to prepare them some time ahead before planting the seed. If manure cannot be obtained, use good commercial fertilizer or sheep manure mixed with the soil. Some of the largest and best crops we have ever seen were produced on sod land, using 200 lbs. of fertilizer per acre in the hills.

One ounce plants 20 hills; 4 lbs. per acre. Plant early in May or for later use, in June.

CULTURE-Treat as for Musk Melon, but give more room, say 10 or 12 feet apart each way.

INSECT REMEDIES-Same as for Musk Melon.

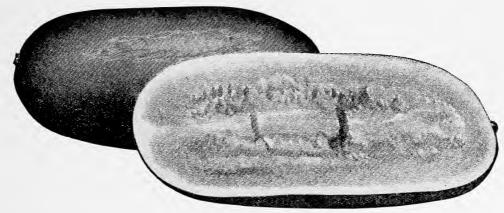
205 TOM WATSON—A long, dark green melon, which has become exceedingly popular on account of its large size and general fine qualities. Vines are vigorous and productive. Flesh rich bright red, very juicy and sweet. Most suitable for nearby markets, family gardens, and a favorite with truckers, as it stands shipping well and retains its color and good quality a long time.

206 KLECKLEY'S SWEET — One of the best flavored melons in cultivation and one of the best for home use or nearby markets. It is long, very dark green with thin rind. Flesh deep red, of fine delicious flavor.

207 FLORIDA FAVORITE—A well known popular sort which has long been a favorite for home use and market, Ripens early, has dark green rind, striped with light green. Flesh light crimson, exceedingly sugary, fine and tender. Very delicious and highly recommended either for home market or family use.

WATERMELON—Cont'd

(See Page 5 for Prices)



HALBERT'S HONEY

208 KOLB'S GEM—One of the older sorts producing oval melons and all large size. The rind is exceedingly hard and firm, being irregularly marked with mottled stripes of dark and light green. Flesh is bright red, solid, a little coarse but sweet. One of the best round sorts for shipping as it will handle better than almost any other sort.

209 SWEETHEART—A very popular shipping sort particularly in the South. Fruits are very large, oval, very heavy with thin rind which is of light green color, slightly veined with darker shade. Flesh bright red, firm, very sweet and the fruits remain in condition a long time after ripening. A splendid sort for market or main crop being of fine appearance and sells readily.

210 PEERLESS OR ICE CREAM—A splendid early sort for home or market gardens. Vines moderately vigorous, hardy and very productive. Fruits are oblong, medium size, bright green finely veined with darker shade. Flesh bright scarlet, crisp and very sweet.

211 GRAY MONARCH OR LONG LIGHT ICING—Fruits uniformly long and large, oblong in shape. Color light green slightly veined with darker shade; flesh deep rich red of splendid quality.

212 GYPSY (or Georgia Rattlesnake)—One of the most popular of the older sorts especially in the South. Fruits are large, very long, of light green color distinctly striped and blotched with darker shade. In the South it is very highly esteemed and especially desirable for growing and shipping. The rind is remarkably thin though very tough; hence, it stands shipping well. Flesh most tender, sweet and luscious. Fruits are uniformly good quality.

213 HALBERT'S HONEY—A long dark green melon of moderate size but such splendid quality that it is especially desirable for market or home use. The rind is very thin. Flesh bright crimson and so crisp and tender that ripe melons will split ahead of the knife in cutting. We especially recommend this for general planting as it is very productive, of excellent quality and a splendid seller.



214 DARK ICING—A round or oval shape which has long been a favorite for home use and in nearby markets. Melons are medium sized, oval, dark green in color with bright red flesh which is extremely tender and sugary. A splendid early sort and highly desirable for home use or for early crop for market.

215 DIXIE—A variety similar in marking and general characteristics to Kolb's Gem but instead of being oval it is long—hence, more desirable on the general markets. It has all of the good characteristics as a shipper. Vines vigorous and productive.

217 PRIDE OF GEORGIA—A large, oval melon, dark green color. Good sort for market or home uses.

218 CITRON—Used for preserves and pickling, only, as the fruit cannot be eaten. The melons are small. round and will keep quite a long time; seed, red.

MUSTARD

(See Page 5 for Prices)

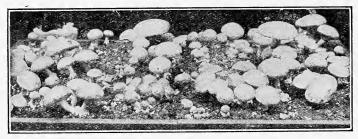
Quite popular in the Southern States for boiling as greens. The Southern Giant Curled is becoming popular for shipping. White and Black Seeded are used for pickles and medicinal purposes. Black Seeded is also used as a poultry tonic.

CULTURE—Sow broadcast or in drills 12 inches apart in March or April or in the fall in September or October. Cut when 3 inches high. One ounce sows about 80 feet of drill. An acre requires 4 to 6 lbs.

219 SOUTHERN GIANT CURLED, OR CHINESE—A large growing sort with succulent, pungent leaves of sweet flavor. The best variety for use as greens.

220 WHITE—Used for greens and the seed largely used for pickles and flavoring.

221 BLACK.



MUSHROOMS IN A BED

MUSHROOM SPAWN

Mushrooms can be grown in cellars, sheds, under benches in green houses or hot beds. They are also planted outside in pastures or sod. It is a very profitable crop both for forcing or a field crop. Our cultural instructions are somewhat limited but we can furnish a booklet of more extended information on "How to Grow Mushrooms." Price, 10c.

One brick will spawn about ten feet square.

culture—In preparing a mushroom bed, take three parts fresh stable manure, free from straw, and one part of good pasture soil. Mix thoroughly together and let it stand until the heat has sunk to about 90 degrees. Make the bed from this mixture about four feet wide, eight inches deep and any desired length. As soon as the temperature of the bed is about 70 or 80 degrees, the spawn may be inserted in pieces about the size of a walnut, and six inches apart each way. When the spawn is diffused through the whole bed, which will be in about ten days from planting, cover with two inches of fine loam and press down firmly. Over this place a layer of straw about four inches thick. Do not water unless the surface gets extremely dry, and then only with water at a temperature of 80 degrees. When gathering the crop, twist them off at the roots and do not use a knife. Cover the hole with soil to keep insects away from the root. Mushrooms can be grown in a great variety of situations; under the benches in a green house, a dark room, cellar, stable or elsewhere.

ENGLISH MUSHROOM SPAWN—Well known and popular. Put up in bricks weighing about 1½ lbs. Per brick, 25c; 5 bricks, \$1.00.



WHITE VELVET OKRA

OKRA OR GUMBO

(See Page 5 for Prices)

One of the most popular Southern vegetables and largely used for flavoring soups, stews, gravies and canned tomatoes.

CULTURE—Sow in drills 2½ feet apart after the weather has become settled and warm. Thin out to 18 inches apart in rows. To keep for winter, slice the pods when young in narrow rings and string or hang in the shade to dry.

One ounce sows about 100 feet. 10 lbs. per acre. Plant In April or May. Matures in 60 to 70 days from planting.

224 WHITE VELVET—An early maturing and very productive variety growing about 3½ feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sorts and is very popular in some sections.

225 DWARF PROLIFIC—One of the most popular sorts in the South, growing 3 feet high, producing large pods deeply ribbed, tender, fine flavor.

226 PERKINS' MAMMOTH—Plant dwarf; are very attractive. Producing long, slender, deep green pods, which remain tender a long time.

ONION SETS

There are three distinct classes of these. Potato or Hill onion sets can be planted in the fall from August to November and produce both green spring onions, large onions and sets. Perennial or Egyptian Top onion sets are planted in the fall or very early in the spring and produce green spring onions early in the spring. Bottom Sets or regular onion sets of commerce are small onions which were previously grown from seed. These, set out early in the spring or in the South in the fall, produce one large onion from each set, towards the end of June or first of July. Pickling onions (which is a larger size bottom set) are used in some localities for fall planting to produce early green spring onions. All onion sets are hardy and can be set in the open ground as early as the weather will permit. They are usually planted in rows 15 inches apart—4 inches apart for small sets and 6 to 8 inches apart for potato sets. Potato onion sets can also be planted in the spring. It takes about 16 bushels of bottom onion sets per acre, and 20 to 25 bushels of potato onion sets, according to the size and distance apart. Cultivate with hoe until maturity.

If to be sent by mail, add 6c per qt. for postage.

Prices of onion sets are subject to market changes. Prices on application.

YELLOW DANVERS-Probably the most largely planted of all onion sets, producing an early crop of fine quality onions.

WHITE OR SILVER SKIN—Pure white of mild flavor and usually preferred for private gardens.

AUSTRALIAN BROWN—A very hardy variety of medium size which is extremely early and of good quality.

YELLOW POTATO OR HILL—A mild, yellow variety, producing several large onions and clusters of sets.

EGYPTIAN OR PERENNIAL TREE (Called Top Onion Sets)—For spring or summer green onions.

ONION

(See Page 6 for Prices)

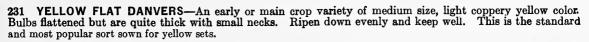
One of the most nutritious and healthy of vegetables, having excellent medicinal qualities and most useful for flavoring salads, soups, meats, etc. It can be produced easily from either sets or seed and is one of the most satisfactory vegetables in the garden.

A good crop of onions is 400 to 800 bushels per acre. A good crop of onion sets 300 to 400 bushels per acre.

CULTURE—Growing Large Onions from Seed—Seed is sown in rows 15 inches apart as early in the spring as ground can be worked and covered about ½ inch deep. The Planet Junior Seed Sower is the implement for this and it requires 4 to 5 pounds per acre. Cultivate with a wheel hoe as soon as plants are up and hand-weed. After getting a good start thin onions to about 4 inches apart. Constant weeding and cultivation are required throughout the season. Rich soil, most heavily manured is required to grow large crops of onions. The mucklands of Ohio, Indiana and Illinois are particularly suited to this crop but fertilization has to be kept up to produce a large and profitable crop. Onions grown from seed mature much later than those grown from sets.

Grawing Sets—To produce commercial Onion Sets known as Settom Sets, the seed is sown in rows 11 to 12 inches apart in fine clean soil at the rate of 40 to 60 lbs. per acre. Cultivate with a wheel hoe and hand weed. The sets are ready for pulling in July and are cleaned and stored in an airy loft. For pickling onions, one ounce sows 150 ft.; 15 lbs. per acre.

230 LARGE RED WETHERSFIELD—A splendid red variety, very popular in the East. Bulbs somewhat flattened, thick and very large. Skin deep purplish red, flesh white tinged with purple, moderately fine grained, strong but pleasant flavor. It is medium early and well suited to rich soils. Is a good keeper and productive.

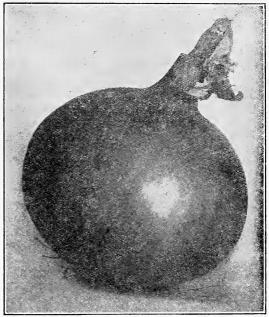


YELLOW DUTCH OR STRASBURG—Similar to the well known Yellow Danvers except that it is somewhat lighter in shade and very much esteemed in the East.

233 YELLOW GLOBE DANVERS—One of the most extensively grown yellow onions. Bulbs are of large size, uniformly globe shape with small necks. Ripen evenly. Flesh creamy white, crisp, mild and excellent flavor. Onions have a yellow coppery color, showy and handsome.

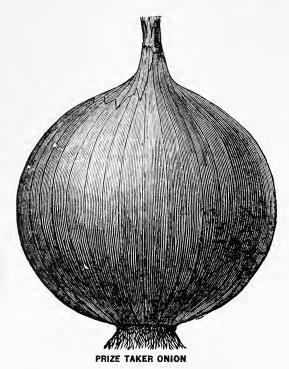
234 OHIO YELLOW GLOBE—A very much esteemed and popular sort grown extensively in this state. Particularly suited to rich soils. Onions somewhat more flattened at the base than Yellow Globe Danvers and more blunt at the top. Color rich yellow tinged with orange. Flesh creamy white, mild and fine flavor. One of the best for main crop planting and shipping as it is an excellent keeping sort.

235 AUSTRALIAN BROWN—A very hardy variety of medium size which is extremely early and of good quality. The outer skin is darker in color than Yellow Globe Danvers. Onions are very solid, excellent quality and will stand handling better than almost any sort.



OHIO YELLOW GLOBE

ONION-Cont'd



236 PRIZE TAKER—A large European sort which has become thoroughly acclimated to this country and produces enormous onions the first season from seed. Skin is yellowish brown; flesh creamy white, very mild, tender and of excellent quality. By early sowing in hot beds and transplanting, Prize Taker Onions as large as 4 lbs. have been grown in a season. Its large size and attractive appearance make it a popular sort for selling on fruit stands at fancy prices.

237 SILVER SKIN OR WHITE PORTUGAL—A well known and favorite variety making medium size onions of mild flavor with beautiful, clear white skin. Largely used for sets and pickling onions. Mature 10 days earlier than White Globe. Bulbs are nearly round when of bunching size but somewhat flattened when mature. One of the best flattened sort for general use.

238 WHITE GLOBE—A fine early or main crop sort for home gardens. Flesh is firm, fine grained, white, mild and more desirable for cooking than the yellow or red sorts. Bulbs are globe shape, full at the shoulder, round at the base, keep well and a good market variety.

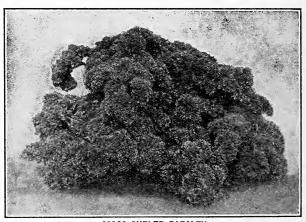
PARSLEY

(See Page 6 for Prices)

Easily grown and useful for so many purposes, such as garnishing, seasoning salads and for ornamental purposes. Grown in the garden as edging it is both ornamental and profitable.

CULTURE—Seed is sown in rows ½ inch deep and one foot apart. Cover firmly but not deep. As it is slow to germinate, usually taking 3 to 4 weeks, soaking in water is desirable. One ounce sows 150 ft. of drill. For winter growing it can be sown or transplanted to cold frames or to hot beds and is usually profitable.

239 CHAMPION MOSS CURLED—A beautifully curled and crimped variety which is much preferred. It is vigorous, compact in growth and excellent for garnishing—a handsome decorative plant. One of the most popular for market and home gardens.



MOSS CURLED PARSLEY

240 HAMBURG OR ROOTED—This produces an edible root resembling a small parsnip both in color and shape. Flesh white, flavor similar to Celeriac. Foliage is about the same as plain parsley. Roots are extensively used for flavoring soups and stews and can be dug late in the fall and stored in sand for winter use.

241 PLAIN—A hardy variety having very dark green leaves which are flat, deeply cut but not curled. It is a little stronger in taste and much esteemed for flavoring soups, stews, as well as for drying.

Remember The J. Chas. McCullough Seed Company's Location:

STORE AND SALES DEPARTMENT: 228-230-232 E. 4th St. TELEPHONE, MAIN 5640
Connecting all Departments

WAREHOUSE AND SEED CLEANING PLANT:
5th, Lock and Eggleston Aves.

PARSNIPS

(See Page 6 for Prices)

A popular vegetable for fall and winter use and of wonderful value for stock feeding. On rich loamy soil produces immense crops, more nutritious than turnips and very valuable for dairy cattle. It will remain in the ground without protection all winter and can be dug as required until it begins to go to seed in the spring; or if desired, store in pits or cellars.

CULTURE—Sow in April in drills 18 inches apart, covered lightly. When the plants are about 2 inches high, thin out from 4 to 6 inches apart. One ounce will sow 200 ft. of drill. 5 to 6 lbs. to the acre.

242 SUGAR OR HOLLOW CROWN (Guernsey)—One of the best and most popular varieties for the table. Roots long, uniform in shape, have a smooth white skin, tender, and of good quality.

243 LONG WHITE — This variety is very hardy and will keep well throughout the winter without protection. The roots are long, smooth, creamy white, tender and fine flavor. Splendid for table use and suitable for stock feeding.



SUGAR PARSNIP

PEAS GARDEN VARIETIES

(See Page 6 for Prices)

Add 5c to pint and 10c to quart prices if by mail. Or for Zone rates, one pint weighs about 15 oz., one qt. about 30 oz.

One of the most popular crops in the home garden and usually a profitable one for market gardeners where labor for picking can be readily obtained. One pint sows 75 ft., 1½ bu. per acre. The earliest sorts can be planted just as soon as the ground is in condition to work. Wrinkled varieties a little later as they are tender. For succession, plant different sorts. For fall crop sow in August.

One pint planted every two weeks will yield a succession and is enough for a medium sized garden.

CULTURE—Peas succeed best in light, rich, loamy soil which has been manured the previous season. Sheep manure or good commercial fertilizer in the drills mixed with the soil will give excellent results. Sow about one pt. per 100 ft. or 120 lbs. per acre. The early dwarf varieties can be planted in rows 2 ft. apart. The tall varieties in rows 3 ft. apart. Peas can be staked with sticks or wire netting on stakes. Tall varieties yield more abundantly than dwarf. Cultivate and keep clean, working the earth toward the vines rather than away from them

Packets and $\frac{1}{2}$ pints postpaid. If to be sent by mail add 5c to pint prices and 10c to quart prices.

For Zone Rates. 1 pint weighs about 15 oz. 1 qt. about 30 oz.

EARLY ROUND OR SMOOTH

244 MAUD S—The earliest and most prolific Pea known. The pod is of a dark green color, of a full, round shape, and of strong texture which especially fits it for shipping long distances. For a late fall crop it has few equals, and is the market gardener's favorite for all seasons. The far northern point at which our Peas are grown renders them almost proof against cold, and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this Pea unequaled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well.

245 MC EXTRA EARLY—One of the best strains of extra early peas; producing abundantly. Vines grow 2 to 2½ ft. high; pods 3 to 3½ inches long, well filled with fine delicious quality peas. Not only is this probably the earliest of all garden sorts but its yield is so abundant that it is the most profitable variety of all for market gardeners, in addition to being the best early sort for home gardens. Seed is white, smooth, medium size. Vines thrifty, vigorous, robust and extremely productive.



IN EXTRA EARLY PEAS

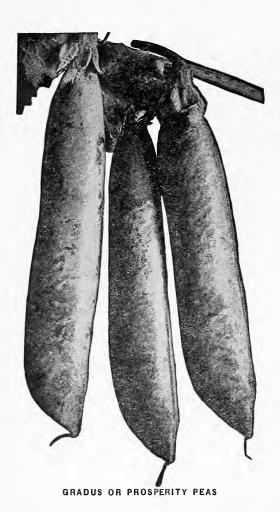
246 ALASKA—A favorite sort with Southern truckers, producing long straight pods which will stand shipping, remain green longer than white seeded sorts. The seed is blue, medium size. Vines about 2½ ft. high, fairly vigorous and usually produce good yields. Pods long, straight and attractive appearance. This has long been a popular sort, is of fair quality and well known.

PEAS-EARLY ROUND OR SMOOTH-Cont'd

(See Page 6 for Prices)

249 TOM THUMB—A smooth white seeded sort, dwarf growth. Vines averaging 10 to 12 inches high, very hardy and fairly prolific but especially valuable in that they do not require sticking.

PEAS—EARLY WRINKLED SORTS



These are of very much finer and superior quality to the Smooth sorts, consequently are much to be preferred for private gardens or market uses, except for very earliest crops. They are not quite as hardy as the smooth varieties—hence, should be planted just a little later.

250 GRADUS (or Prosperity)—One of the very best early wrinkled large podded peas. The pods are fully as long as Telephone. Vine similar in appearance and does not grow so tall, being of medium height about 3 to 3½ feet. The Pods are 4 to 4½ inches long, pointed, handsome and one of the most attractive of the early wrinkled sorts. Peas very large, splendid quality and a beautiful light green color. This has been one of the most popular varieties in cultivation.

251 THOMAS LAXTON—A comparatively new early wrinkled sort of superior merit. Vines vigorous, growing about 3 ft. high; have dark, vigorous foliage, similar to Gradus but hardier and more productive. Pods about 4 inches long, square ends, similar to Champion of England but larger, longer and darker. Peas are fine quality and it is destined to become one of the most popular of the early sorts on account of its productiveness.

252 LAXTONIAN—One of the largest podded of the dwarf wrinkled peas. Pods are about 4 inches in length, of a beautiful dark green color, similar to Gradus in shape, of splendid quality and mature a little earlier. Vine averages 15 to 18 inches in height, vigorous, productive and has dark green foliage.

253 LITTLE MARVEL—An extra early dwarf wrinkled sort particularly suited to home gardens. Vines average 15 to 18 inches high, vigorous, dark green foliage. Peas are borne together in pairs of twos. Though comparatively a new sort it has become exceedingly popular on account of its large productive yield.

254 AMERICAN WONDER—A favorite dwarf, early, wrinkled Pea which is highly esteemed and splendid for family use. Vines about 9 inches to 1 ft. high, covered with well filled pods medium size, about 2¾ inches long, containing 5 to 8 large, exceedingly sweet, tender peas.

255 NOTT'S EXCELSIOR—A few days later than the American Wonder. Pods about one-quarter larger. It is remarkably hardy and can be planted almost as early as smooth sorts. Height 1 to $1\frac{1}{2}$ ft. One of the best for home gardens and a profitable variety for market gardeners.

256 SUTTON'S EXCELSIOR—A very large podded dwarf variety. It is exceedingly vigorous, unsurpassed in quality; pods mature nearly as early as Nott's Excelsior but are broader and about the same length. Height 15 to 18 inches.

257 McLEAN'S LITTLE GEM—This has long been a favorite among early dwarf peas. It matures a little later than American Wonder, is somewhat taller in growth and a little more prolific. Vines vigorous and productive, growing 15 to 18 inches high; pods 2¾ inches long, crowded with peas of fine quality.

PEAS-Cont'd

MEDIUM CROP VARIETIES

(See Page 6 for Prices)

259 BLISS' EVERBEARING—A popular sort, with stout vines of medium height, about $2\frac{1}{2}$ ft. high bearing at the top 6 to 10 broad pods of medium size about 3 inches long. If picked as they mature they grow out more branches, thus keeping up succession. Peas are fine flavor, tender and superior quality.

260 DAISY OR DWARF TELEPHONE—Similar in general characteristics to the well known Telephone. Pods 4½ to 5 inches long, dark green; peas large, of superior quality, tender and sweet. Vines about 3 ft. high.

LATE OR MAIN CROP SORTS

261 DUKE OF ALBANY—A very large wrinkled variety, similar to Telephone in growth but darker in color of foliage and pods. Vines tall, about 4½ to 5 ft., vigorous, strong growing. Pods large size, 4½ to 5 inches; peas tender and sweet. On account of its productiveness, dark green color and general attractive appearance, it is destined to become one of the leading market sorts and its fine qualities recommend it for home use for main crop.

263 **TELEPHONE**—One of the leading peas with market gardeners on account of its vigorous, tall growth and productiveness. Vines about 4 ft. high, foliage light green, producing an abundance of pointed pods, very large and light green. Peas large, tender, very sweet, excellent flavor. A splendid sort for home gardens and profitable for market.

264 ALDERMAN—A new Pea like the Telephone, only better. The vine is extra vigorous, and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the finest of the large-podded summer varieties. The haulm grows five feet in height and is of a rich, dark green color, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor.

265 CHAMPION OF ENGLAND—One of the older varieties which still retains its popularity on account of its productiveness and general good qualities. Vines tall, 4 to 5 ft. pods large about 3 inches long, borne in abundance. Peas tender and exceedingly sweet. A favorite sort for home gardens.



DUKE OF ALBANY

266 WHITE MARROWFAT—Vines about 3½ ft. high. Vines exceedingly productive. Pods long, well filled; peas smooth, rather coarse quality. Sown in many localities for market but not satisfactory for home gardens.

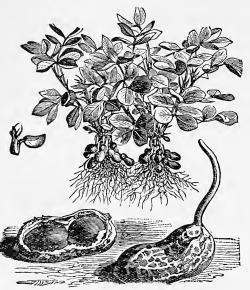
267 BLACK EYE MARROWFAT—More prolific than the White Marrowfat. Vines somewhat stronger and about the same height. Quality coarse, valuable only for market purposes.

268 MELTING SUGAR (Edible Pods) — These are used in the same manner as Snap or String Beans, the pods and peas being sliced and boiled. Pods very large, 4½ inches long, broad, curved and twisted. They are when young, very tender, stringless and fine flavored. Vines are tall, 4½ to 5 ft. high, with light foliage; are very strong growing and prolific. We strongly recommend more extensive planting of these fine quality peas. They are very popular in Europe and should become more generally known in this country.

INOCULATION FOR PEAS—Excellent results will be obtained by treating the seeds of Peas with Inoculation Bacteria before planting. It can be easily done. We have it put in convenient size for small gardens. (See page 81.)

PEANUTS

(See Page 6 for Prices)



VIRGINIA PEANUTS

For medium light, loamy or sandy land, peanuts are one of the most profitable crops that can be grown. They yield very largely—yields of 50 bushels per acre being reported on land too poor to plant in corn. In addition they yield quite largely of nutritive forage, and will yield ordinarily about a ton of excellent dry forage per acre, in addition to the crop of nuts.

Peanuts should be shelled before planting. They should be planted in May or early June, in rows about 2 to 3 feet apart dropping the nuts 8 to 10 inches apart, 1 in a hill. Cover 1 or 2 inches deep. Cultivate 3 or 4 times with a cultivator, so as to loosen the earth and keep down weeds, and at the last working, with a small turn-plow throw the dirt to the nuts. Do not cultivate too late in the season, as late cultivation is likely to injure the formation of the nuts. It is also advisable to make an application of lime, scattering it on top of the row just after planting, and to use a top-dressing of land plaster just after the last working. The use of lime and land plaster as above mentioned is recommended by the most successful growers.

In harvesting, plow the peanuts and then stack around stakes with the leaves outside.

269 IMPROVED VIRGINIA—Large size nuts which are very popular and a fine productive strain.

270 SPANISH—A very prolific variety producing small size nuts, largely grown for hog feeding. Both vines and roots are

pulled up, fed green or cured, making excellent dry food.

STIMUPLANT

Makes a

WONDER GARDEN

PEPPER

(See Page 6 for Prices)

STIMUPLANT Makes a WONDER GARDEN

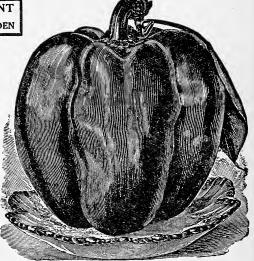
CULTURE—For earliest crop sow in hot bed in February or March and transplant to open ground in May, setting plants about 15 inches apart in rows 2½ ft. apart. Later crops can be sown in cold frames. Cultivate and keep free of weeds. Sheep manure or some good commercial fertilizer applied broadcast around the plant and hoed in when they are about 6 inches high will produce an enormous increase and improvement in yield.

One ounce makes from 1200 to 1500 plants.

271 CHINESE GIANT—An enormous variety sometimes attaining 6 inches in diameter. It is very even in shape, flesh thick and sweet. Very handsome and of superior quality for stuffing. Plants are vigorous and fairly prolific. Very highly recommended for home use and one of the most profitable to grow for market purposes.

272 LARGE BELL OR BULL NOSE—A large early sort of mild flavor. Plant vigorous, 2 feet high, very productive, and ripens its crop early and uniformly. A splendid sort for salads, mangoes and for stuffing purposes. Color deep green which becomes bright crimson when rip.

273 RUBY KING—A very large and attractive sort, deep green color when young, bright red when ripe. Flesh thick and mild flavor. One of the best table sorts.



CHINESE GIANT PEPPER

274 RUBY GIANT—A variety of Mango Pepper, which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant grows to large size and is very mild.

275 LONG RED CAYENNE—A well known medium early sort, having slender, twisted and pointed fruits about 4 inches long. Extremely strong and pungent—hence, valuable for seasoning. Generally known as Lady Finger Pepper.

276 SWEET MOUNTAIN (or Spanish)—Late maturing and an attractive sort. Fruits very large and long, frequently 7 inches in length and 2 inches in diameter; flesh mild, very thick and excellent quality.

277 GOLDEN DAWN—A handsome sweet, mild, yellow variety; fruit pendent, one and a half inches long and about the same in diameter.

278 RED CHILI—Pods about 2 inches in length, ½ to ½ inch in diameter, tapering to a sharp point. Exceedingly pungent—hence, valuable for flavoring and for Tabasco Sauce. The small bright red pods are borne in great profusion, making it an ornamental plant for the garden.

279 PIMENTO—The fruit is of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruit is deep green when young, becoming deep red as it matures.

PUMPKIN

(See Page 6 for Prices)

These make excellent food for stock and can be grown in corn fields at practically no extra expense. We urge larger planting, as they are very nutritious and afford a change in ration.

CULTURE—Generally planted in corn after the last working and gathered after corn has been shocked. For field crop plant in May or June in hills 8 ft. apart, about 8 to 10 seed to the hill and cultivate until the vines get strong; then thin out leaving 2 or 3 of the strongest plants in each hill.

One ounce plants 20 to 30 hills according to the size of the seed. Two or three pounds to the acre.

280 KING OF THE MAMMOTHS—An enormous flattened variety sometimes attaining 100 lbs in weight. It is especially desirable for exhibition purposes, Halloween parties and will find ready sale in most large cities at good prices.

281 JAPANESE PIE—Fruit medium size. Skin light yellow, covered with fine grained netting. Flesh salmon, very thick, sweet, fine flavor and one of the best sorts for cooking.

282 TENNESSEE SWEET POTATO—Medium size of creamy yellow color with light green stripes. Flesh thick, fine grained, dry, brittle and of excellent flavor. Unsurpassed for pies and custards.

283 CASHAW or CROOK-NECK—Fruit fairly large with crooked neck. Skin creamy white with green stripes. Flesh yellow, very thick, rather coarse but sweet. A productive and popular sort in most sections.

284 LARGE CHEESE—A popular sort in this section for table uses and stock. Fruits somewhat flattened; skin mottled light green and yellow. Flesh yellow and of tender quality.

285 **SMALL SUGAR**—Fruit of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened or slightly ribbed. Skin deep orange-yellow, flesh very sweet. This should be more generally grown, as it is really one of the best for pies.

286 **KENTUCKY FIELD**—Grown generally throughout the central section for stock feeding. Fruits very much flattened, creamy yellow color; flesh orange. Very productive.

SELECT SEED POTATOES CHOICE NORTHERN GROWN STOCKS

These are grown for us in the extreme northern parts of Minnesota, Wisconsin and Michigan and can be relied on as being true to name and first quality.

Prices on Potatoes are constantly changing, subject to market fluctuations. Please write for current market prices when ready to purchase.

CULTURE—Potatoes are planted in rows 36 to 40 inches apart, dropping the potatoes 12 to 16 inches apart in the rows. Sheep Manure or some other good commercial fertilizer should be used in the drills even if the land is heavily manured as it will pay wonderfully well. It takes about 1 pound of fertilizer to 30 to 40 feet of drill, 400 to 600 lbs. per acre. It takes 9 to 12 bushels to plant an acre according to size of potatoes and distance of rows apart. Plant for early crop as soon as the ground can be gotten in condition. For late crop, in July or 1st of August is best.

INSECT REMEDIES—For the Potato Bug, Paris green is most effective remedy and on large areas had better be applied with a Leggett's Champion Paris Green Gun or Beetle Duster. For a small garden, mixing with land plaster, 1 lb. to 100 lbs. of plaster and dusting; or if sprayed use one pound of Paris Green to 100 gallons of water. Slug Shot can be used in small gardens if desired. For preventing Blight and increasing growth of vines and yield of potatoes, spray with Bordeaux Mixture two or three times. It has wonderful results. Paris Green can be used mixed with it if desired.

Unless seed is free from scab and other diseases, it should be sterilized or disinfected. This can be done by soaking the uncut seed in a solution of formaldehyde for 2 hours and then drying. The formaldehyde is to be diluted at the rate of $1\frac{1}{2}$ oz. for each 3 gallons of water. The formaldehyde can be obtained in drug stores, is of slight cost, and is well worth the effort required to use it.



EARLY ROSE POTATO

days earlier than Early Rose. The tubers are oval, have few eyes rather shallow. Smooth skin, white, slightly flushed with pink. It is an extra fine quality cooking potato; makes good sized yields and is a favorite in this section and many others, especially where planted on light and loamy soil.

EARLY ROSE—An old favorite sort which has long been popular for family use and still planted in many sections as the

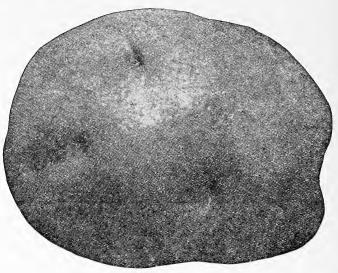
main variety for early crop. Tubers are oblong, light pink at the bud end but mostly white. It is of finest quality, cooks very mealy and one of the best for family use.

SEED POTATOES-Cont'd

BEAUTY OF HEBRON—Similar in appearance and growth to Early Rose from which it was a sport. It is not quite so pink at the bud end. Skin white, flushed with rose, cooks very mealy; excellent flavor and popular for home use and some markets.

IRISH COBBLER—This has become an exceedingly popular and profitable variety for growing for market. Tubers are oval with smooth white skin, have few eyes rather deep. Grows to large size and produces enormous yields. Vines are thrifty and a reliable heavy yield can nearly always be expected. An excellent sort for market purposes and produces good crops both early and late.

CARMAN No. 3—One of the most desirable of all potatoes for second early or late crop, producing enormous yields of extra fine quality potatoes. It is round, slightly flat-tened, pure white; has beautiful smooth skin, shallow eyes and is a fine table variety as well as extra fine keeping sort. Vines are vigorous and productive. We heartily recommend this to all growers for market or for family use as second early or late sort.

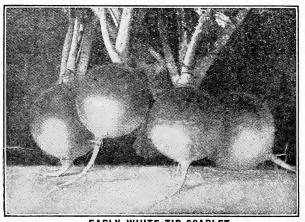


IRISH CORBLER POTATOES

SWEET POTATOES

We carry in stock the best sort of seed grown by reliable planters.

Bermuda and Southern Queen. Prices variable. Write for quotations. Varieties, Yellow and Red Jersey, Red Cannot be shipped until about April 1st.



EARLY WHITE TIP SCARLET

RADISH

(See Page 6 for Prices)

FINEST SEED STOCKS

One ounce sows 100 ft. of drill. If broadcasted requires 10 to 12 lbs. per acre. For forcing in frames sow in January or February. Out of doors, sow from March to June for early and summer crop. For late, sow from July to September. Early sorts mature and are ready for the table in 21 to 30 days from sowing.

CULTURE—Quick growth is essential for tender, crisp radishes. Hence, rich soil and plenty of moisture are essential. They can be sown at intervals of ten days to two weeks for early use or grown as a catch crop between rows of beets, lettuce, onions, etc. When forced they require plenty of ventilation and moisture.

ROUND VARIETIES

of the handsomest of the turnip varieties and a general favorite in nearly all large markets. It is excellent as a forcing sort or for earliest planting outdoors. Roots nearly round, slightly flattened on under side. Color very deep searlet with distinct white tip. Flesh white of best quality. We strongly advise more extensive planting of this sort in this locality.

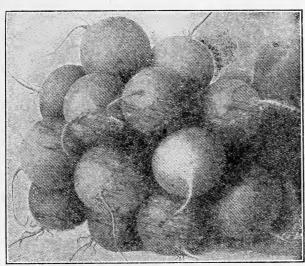
EARLY WHITE TURNIP-Similar to Early Scarlet Turnip but little more flattened and slightly earlier maturing. It has very small tops, is of quick growth, suitable for forcing or early planting. Color clear white; flesh crisp and tender.

289 GOLDEN GLOBE—A splendid sort for second early crop as it does not get pithy easily and produces tender, crisp roots. Skin golden yellow, flesh white. Roots uniformly globe shaped, 2 inches long and 2¼ inches in diameter when mature.

WHITE GIANT STUTTGART—A splendid summer sort, producing large roots often 4 inches in diameter, naped. Skin is white, flesh white and crisp and does not become pithy until very late. Valuable for top shaped. both early summer and fall crops.

BREAKFAST — A small olive-shaped variety about 1½ inches long, which is very quick growing. Color beautiful deep scarlet shading to white at the tip. Top small. Quick maturing and splendid for very earliest crop.

RADISH-ROUND VARIETIES-Cont'd



EARLY SCARLET TURNIP

(See Page 6 for Prices)

292 EARLY SCARLET TURNIP—A well known sort producing round or oval roots of bright scarlet color. Flesh white, crisp and tender. Tops medium quick growth and desirable for early planting.

293 EXTRA EARLY SCARLET GLOBE—One of the very best and most showy radishes for earliest forcing or growing outside. Roots are slightly olive shape, rich bright scarlet color; flesh white and tender. It is fit to pull very early and is especially desirable for market gardeners on account of its showy qualities.

294 NON PLUS ULTRA—A fine, extra early forcing radish. Roots are small, nearly round, scarlet, tops very small. Flesh white, crisp and tender. One of the handsomest of the forcing sorts.

LONG VARIETIES

295 CINCINNATI MARKET—A popular sort in this section which has long been a favorite with market gardeners as it commands ready sale and good prices on this and nearby markets. It is a brilliant crimson color with white slightly tinged flesh, exceedingly sweet and tender. Grows 6 to 7 inches in length, straight and smooth and does not become hollow and pithy until very old. A remarkably fine sort for either market or home use.

296 LONG SCARLET SHORT TOP — An old standard sort which is excellent either for home gardens or market. Tops short and small. Roots smooth, tender, uniform in shape; an attractive bright red color.

297 CHARTIER (Scarlet)—One of the best long Scarlets for second early summer or fall uses. Roots when fully grown, average 7 to 8 inches long

and 1½ to 2 inches thick but even when only ½ inch thick are in good condition for table. It remains longer without getting pithy than any of the summer sorts. Color bright crimson shading to white at the tip.

298 LONG WHITE ICICLE—The earliest of the long white varieties which is popular for forcing and earliest outdoor or early summer

crop. It is productive and of excellent quality, crisp and tender. Roots are usually 5 to 6 inches long and about ½ inch in diameter with small tops.

WHITE ICICLE RADISH



CHARTIER RADISH

white radishes for second early or summer crop. Even when comparatively small it is fine quality and remains crisp and tender much longer than other early varieties. Roots when full grown are $1\frac{1}{2}$ to 3 inches and 5 to 6 inches long, tapering. Tops medium; roots smooth, crystal white color, handsome, showy, crisp and tender and especially desirable for market or family use.

300 LONG WHITE VIENNA—An excellent second-early variety producing roots 6 to 7 inches long, moderately thick, crisp and tender. Matures a little later than Cincinnati Market.

FALL RADISHES

(See Page 6 for Prices)

301 LONG BLACK SPANISH—A favorite late sort producing long, thick, almost black, roots, with white flesh of fine texture. Decidedly pungent but well flavored. Roots are usually 7 to 9 inches long, 2 to 3 inches in diameter and it is one of the best of the long sorts and especially adapted for winter use.

802 ROUND BLACK SPANISH—Roots top shaped, 3 to 4 inches in diameter; skin black, flesh white; excellent quality. Similar in characteristics and quality to the long sort but better suited for shallow or heavy soils on account of its shape.

303 SCARLET CHINA WINTER (Rose China)—A popular sort producing cylindrical roots, stub-rooted, blunt, at both ends. Is bright, deep, rose color shading to white. Skin smooth, flesh white, crisp, tender and pungent. Roots usually 4 to 5 inches long, 1½ to 2 inches in diameter. A splendid sort for fall and winter.

304 WHITE CHINESE (New Celestial)—A large stumprooted Radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition a long time; mild in flavor, brittle and never woody. Fine for market gardeners.



RHUBARB

This is ready to use very early in the spring and has fine medicinal qualities in addition to being delicious for making pies or as stewed rhubarb.

CULTURE—Strong roots planted in the fall can be used in limited way the following spring. If planted in the spring had better remain one year to establish growth. Seed sown early in spring in drills 15 inches apart will produce fair roots by next season. A rich,

moist soil is desirable. When a few inches high, thin out or transplant 12 inches apart. The following fall transplant to deep soil, manured well, 3 by 4 ft. and protect with litter or leaves. Never allow Rhubarb to go to seed as it weakens the plant.

One ounce sows about 75 ft.; 6 lbs. to one acre. About 12 roots are sufficient for an ordinary garden. Plant roots in March, April or November. Sow seed in April.

305 VICTORIA—A favorite sort for general purposes. Very large and tender.

STIMUPLANT Makes a WONDER GARDEN

SALSIFY

STIMUPLANT Makes a WONDER GARDEN

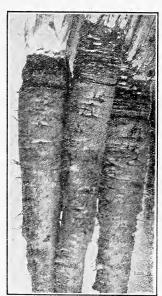
(See Page 6 for Prices)

A desirable winter vegetable which should be more extensively used throughout the Central States. Roots are palatable and can be served boiled or as fritters.

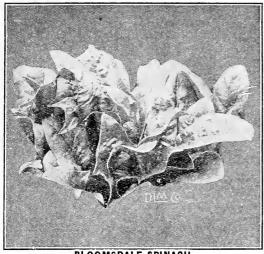
CULTURE—Sow in April in rows 18 inches apart, thinning out to 4 to 6 inches. ultivate deeply and often. It is hardy and will remain out all winter but if desired can be dug before winter and stored in earth or sand to keep it from wilting.

One ounce sows 100 ft.; 6 to 8 lbs. are required per acre.

306 MAMMOTH SANDWICH ISLAND — The best sort which is much larger and a great improvement over the old-fashioned long sort.



SAND ISLAND SALSIFY



BLOOMSDALE SPINACH

SPINACH

(See Page 6 for Prices)

Has long been one of the most popular of all greens for market gardeners and truck growers and in some sections is grown in enormous quantities. In this locality Spinach is sown broadcast in March or April for early crop and from July to September for fall and winter crop at the rate of about 10 to 15 lbs. per acre. It can also be sown in drills 12 to 15 inches apart and cultivated.

One ounce sows 100 ft. of drill. 10 to 15 lbs. per acre in drills. 15 to 20 lbs. per acre, broadcast. Onehalf pound is sufficient for a medium garden.

307 KING OF DENMARK—The New Evergreen Spinach. This variety is superior to all others for spring planting, under the same circumstances, in the matter of standing a longer time before going to seed. Has an abundance of dark green leaves of large size and very much crumpled and of fine quality. It is fit for use in thirty days from time of sowing, and remains in good condition fully two weeks after other varieties have started seed-stocks.

308 BLOOMSDALE SAVOY (or Norfolk)—A very early sort especially desirable for fall use. Plant is upright, having glossy, thick, crimpled, green leaves, pointed. A favorite sort for market gardeners and truckers.

309 ROUND THICK LEAF—One of the best sorts for spring sowing as it is somewhat slower to go to seed than Bloomsdale. Plant upright, vigorous; leaves large, thick, fresh bright green color.

310 NEW ZEALAND—An especially desirable sort for summer use as it thrives during hot weather in any soil, rich or poor. It has tender shoots of good quality which may be cut throughout the summer. Plant becomes very large and spreading, leaves small, broad and pointed. Plant 3 or 4 seed in hills 2 ft. apart each way. Germination will be hastened by soaking in warm water 24 hours before planting.

SQUASH

Called Cymling in the South

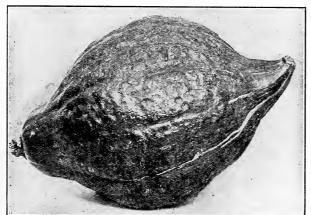
(See Page 6 for Prices)

Summer squash requires one ounce to 30 hills. Winter varieties one ounce to 15 hills and 3 to 4 lbs. per acre-CULTURE—Plant when the weather has become settled and the ground fairly warm. Bush varieties are planted 3 x 4 ft.; running varieties 6 x 8 ft.; about 4 to 6 seeds per hill and thin out later leaving the strongest plants about 3 to the hill. Hills similar to those made for Cucumbers with well rotted manure or fertilizer are best. Winter varieties may be stored in a moderately warm dry place of even temperature

INSECT PESTS—For the Striped Beetle, see under Cantaloupe. For the Squash Bug, Tobacco Dust is sometimes a preventive but Kerosene Emulsion is the best remedy.

SUMMER VARIETIES

311 EARLY WHITE BUSH-A well known early variety, largely planted in the South both for market and home use. Color is creamy white with comparatively smooth surface, somewhat flattened and scalloped. Vines are bush, vigorous and very productive. Known as Patty Pan or Cymling in the South.



HUBBARD SQUASH



EARLY BUSH SQUASH

GOLDEN SUMMER CROOK-NECK-An old standard running sort having long fruit with uniformly crooked neck. Color is bright yellow; densely warted surface and very productive.

313 FORDHOOK—An excellent running sort for both summer and winter use. Vines are strong, vigorous growth and very productive. Fruits 8 to 10 inches in length, oblong, slightly ridged; smooth, yellowish skin. Flesh thick and light yellow in color.

WINTER VARIETIES

314 GOLDEN HUBBARD-Similar to the old Hubbard excepting the skin is of a rich orange-red and heavily warted; flesh of extra fine quality.

315 WARTED HUBBARD-Similar in fruit and shape to Hubbard except that the surface is very much warted. It is very handsome in appearance and extra quality.

316 BOSTON MARROW-Vines strong, of running growth and very productive. Fruits large, orange skin, deep orange flesh, oval with hard shell; a superior winter sort.

VEGETABLE MARROW-A variety very much esteemed in England and many parts of the North. 317 Vines are of bush habit, producing elongated fruit about 9 inches long of pale straw color changing to deeper shade. Flesh is white. Young and tender fruit when sliced and fried in oil makes a vegetable delicacy highly esteemed. Can be used as other squash; has an especially delicate flavor.

TOMATO

(See Page 6 for Prices)

A popular crop in all home gardens and usually profitable for truckers, market gardeners and growers for canning factories.

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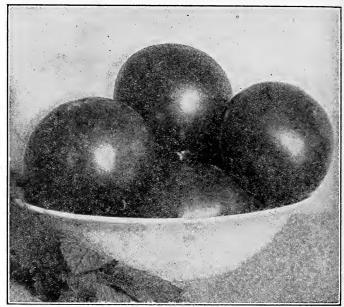
CULTURE—For earliest crop sow in a hot bed or shallow boxes in February or March, transplanting when 2 or 3 inches high to small pots, trays or cold frames. When danger of frost is past (usually in this climate the lat to 10th of May), set in open ground 3 x 4 feet apart. Well rotted manure, sheep manure or other good commercial fertilizer should be used in the hills at the rate of a dessert spoonful per hill or about 200 lbs. per acre mixed with the soil. It is essential for producing good stocky growth that the soil be enriched in this manner as it will have a tendency to prevent blight and add vigor and fruitfulness to the vines. Tomatoes should be staked to keep the fruit from the ground and it will help also prevent blight, mildew and make them more prolific.

INSECTS AND BLIGHT—For the green worm

INSECTS AND BLIGHT—For the green worm which eats the foliage, use Hellebore, either dry or in solution, or Paris Green mixed with water at the rate of 1 lb. to 150 gallons and spray. For rot, blight and other diseases, spray the plants with Bordeaux Mixture in solution, commencing early.

Directions will be found under Insecticides.

One ounce produces about 2500 plants; 2 ounces produces enough plants to set one acre. For early crop sow in February; for late crop sow in open bed in April or May.



PURPLE KING TOMATO

EARLY VARIETIES

318 PURPLE KING—One of the largest and best of the purplish pink varieties. Vines very vigorous and productive; fruits smooth, uniform in size nearly globe shaped. It is an extremely early sort and of excellent quality. We strongly recommend it for market gardens and it will prove one of the best sorts for home gardens for early use. It is especially valuable for shipping. Purple King will become popular wherever grown. It is a very large, early sort and its freedom from cracking and tendency from blight are strong points in its favor.

319 SPARK'S EARLIANA—A deep scarlet, very early variety which is largely planted by truckers and market gardeners. Fruit is borne in clusters, is medium to large, nearly round, and exceptionally smooth for so early a variety. On account of its extreme earliness and the fact that the crop ripens uniformly and very early it is one of the most valuable of the first of the early sorts.

JUNE PINK—An extra early purplish-pink sort similar to Earliana except in color. It is a valuable variety for market gardeners and truckers, especially on markets where purplish sorts find ready sale.

CHALK'S EARLY JEWEL-A particularly desirable sort with purplish scarlet fruit, nearly round, smooth, of large size and a most excellent quality. Fruit ripens early and not inclined to crack, is early and pickings are extended over a long season. One of the best of the early sorts and unsurpassed for home gardens.

322 DWARF CHAMPION—An early variety which is very dwarf growing. The vines are so stiff that they are generally self-supporting. Fruits medium size, purplish red and borne moderately early. On account of its strong, upright growth, it is sometimes sold as Tree Tomato and is desirable on extremely rich soil and where tall varieties have a tendency to make too much vine.

JOHN BAER—An extra early scarlet fruited variety of superior merit. The vines are very hardy and exceptionally The fruits are the largest of the extra early sorts and are also most attractive in color. They are nearly

round, smooth, firm and of excellent quality. It is one of the very earliest to ripen its first fruits and it continues to furnish marketable

fruits much longer than other very early varieties.

324 BONNY BEST—The fruits of this desirable early sort are most attractive in shape and color. The crop ripens more uniformly than any other early scarlet fruited sort, and is of superior solidity and interior color. The vines are vigorous and produce a good crop of exceptionally round and deep fruits, bright deep scarlet in color and of very good quality.

MAIN CROP SORTS

BEAUTY—One of the most satisfactory and popular sorts. Fruits are purplish pink, ripen evenly, are uniform in size, very solid and finest quality. They are exceptionally smooth and do not crack readily. Vines large, vigorous and very productive, ripening fruits about mid-season.

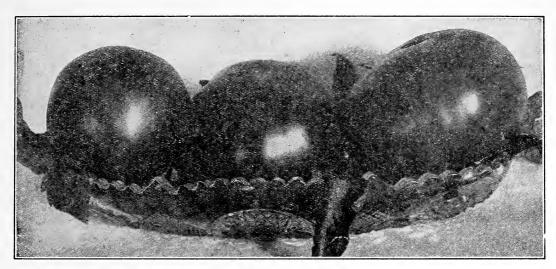
326 STONE—One of the very best Tomatoes producing large, very smooth, solid fruit slightly flattened, deep red color. It is very popular with all market growers and especially desired by canners. Ripens mid-season. On account of its large yields and general uniformity in production we strongly recommend it for both market gardens and home uses.



BEAUTY TOMATO

TOMATO—MAIN CROP SORTS—CONT'D

(See Page 6 for Prices)



PONDEROSA TOMATO

- 327 PONDEROSA—One of the largest and finest varieties for home use. It is purplish pink in color. Vines vigorous, tall, fairly productive. Fruits are very solid and have exceptionally few seeds. It is fairly smooth for so large a variety and sometimes attains such a size that one slice will cover a dinner plate. Very free from acid, has few seeds, is of delicious flavor and most excellent for slicing; ripens about mid-season. On account of its thick meaty flesh and fine flavor it is most desirable for home use, and the large showy handsome fruits are popular sellers for fancy fruit stands.
- 328 TRUCKER'S FAVORITE—A large, deep purple variety, producing uniform size fruit. It is somewhat deeper color than Beauty; fruit being more globe shaped, largely used for main crop, producing fine yields of large, smooth, solid fruits which command best prices—hence very popular with truckers and market gardeners.
- 329 DWARF STONE—Similar to Stone, being bright red, very smooth, solid, fine quality. The plants, however, are very much more dwarf, growing more like Dwarf Champion—hence, require very little staking and can be grown closer together. Valuable for small gardens or market gardens where close planting is desirable.
- 330 LIVINGSTON'S GLOBE—A large, purplish pink, globe shaped sort. Fruits are very nearly round, fairly even in size, smooth and mature quite early. Vines are vigorous, productive and thrifty. It is popular and profitable for outside crop and a very superior sort for green house forcing. Many growers depend for their whole crop on this sort. Our stock of this is very select.
- 331 CINCINNATI PURPLE—A favorite sort in this locality and one of the very best for market or home use. It is very round, smooth, deep shaped, solid and of splendid flavor. Vines are vigorous and remarkably productive. Fruits of large size, very meaty; have small seed cells and of rich flavor.
- 332 EARLY DETROIT—A very productive, early purple sort, uniform in size of fruit, free from cracks, and does not blight easily. Fruit large and smooth. Vines vigorous and quite productive. Quality excellent.
- 334 GOLDEN QUEEN—A large growing variety bearing abundantly. Fruits are golden yellow color, are smooth, well shaped and desirable for slicing as a contrast with red varieties on the table.
- 335 YELLOW PEAR—Fruits pear shaped about 2 inches long, rich clear yellow color, largely used for canning, tomato preserves and pickling.
- 336 RED PEAR—Fruit similar to Yellow Pear, excepting that they are deep purple red color. A splendid variety for preserves.
- 337 YELLOW CHERRY—Fruits 5% inch in diameter, perfectly round and smooth. A splendid sort for sweet or sour pickles and preserves.

TOMATO PLANTS—Leading varieties in season. Cannot send by mail.

TURNIP

(See Page 6 for Prices)

One of the easiest crops to grow and profitable for stock feeding and in most cases for markets.

They cost so little to grow, make splendid nutritious feed and should be much more generally used. A good yield from an acre of Turnips is from 600 to 1000 bushels.

CULTURE—For early use, sow in March or April either broadcast, or in drills, using preferably Milan or Purple Top Strap Leaf or Globe. Rutabaga is sown in June or July, preferably in drills 2 feet apart

Turnips for main crop are sown from July to September 15th, broadcast 1½ to 2 lbs. per acre.

Turnips for greens, can be sown as late as October 1st and require

3 to 4 lbs. per acre.

EARLY PURPLE TOP MILAN—Extra early variety which is very sweet and particularly valuable for sowing in early spring. Roots are medium size, plants purple top flat. Best for private gardens and preferable to grow for early market crop.

339 EARLY RED or PURPLE TOP (Strap Leaf)—A well known early sort which is largely used in all sections. Our stock is American grown and extra choice.

IMPROVED PURPLE TOP GLOBE (Strap Leaf), called also RED TOP GLOBE—A very superior strain, producing large smooth roots, which are sweet and tender. One of the best for early or main crop use. Choice American Stock. Excellent either when young or fully matured.

EARLY WHITE FLAT DUTCH (Strap Leaf)—Similar to Early Purple Top Flat, excepting that it is white all over. Quick grower, excellent quality and splendid for early crop.

342 WHITE EGG-An early, oval variety with smooth, clear white roots, medium size which grow half out of the ground, top small, flesh clear white, fine grained, sweet. Excellent either when young or fully matured.



EARLY RED OR PURPLE TOP TURNIP

LONG WHITE COW HORN-These often grow 12 to 15 inches long and are very valuable crop for stock feed, flesh is white, well flavored and good for table use.

344 YELLOW ABERDEEN—A globe shaped variety with purple top, flesh yellow, sweet, somewhat coarse grain, an excellent sort for stocks, producing large crop.

YELLOW GLOBE or AMBER—A globe shaped variety with orange yellow flesh and green top, valuable for stock feeding.

346 SEVEN TOP—Used entirely for greens and very popular in the Southern States.

347 IMPROVED AMERICAN PURPLE TOP, RUTABAGA—Our stock of this is superior stock and can be depended on by the most critical growers. Rutabaga besides being best food for stock, is the sweetest of all Turnips for table use.

FRENCH TURNIP—(See Kobl-Rabi.)

TOBACCO

(See Page 6 for Prices)

Saved from crown shoots only and grown for us by practical growers.

CULTURE—The seed is sown from February to April in open beds. Ground must be clean, very finely pulverized, raked fine and smooth. It is customary to burn over the top of the bed by piling brush or litter to destroy weed seeds and add fertility for the young plants. After sowing, beds are protected with thin cotton cloth similar to cheese cloth to protect them from tobacco flies. About June let it is set in rich or highly fertilized ground in rows 3½ x 3 ft. Cultivate often and destroy worms by applying Paris Green or Arsenate of Lead.

One ounce sows 50 sq. yds., sufficient to set 2 or 3 acres. sheep manure will give most excellent results on this crop and should be applied in hills two to three hundred pounds per acre.

348 WHITE BURLEY—A standard sort which is more largely grown in Blue Grass region of Kentucky, Ohio, Tennessee and Missouri than any other sort. It is a large growing sort having very broad leaves of finest quality and largely used for fine bright leaf, especially for cigarette tobacco, fine bright mixing tobacco and outside wrappers for plug. Commands highest prices on the market and where soil is suitable the most profitable of all sorts.

349 STAND-UP BURLEY-Has all the good qualities of White Burley but superior to that variety in many respects. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence, the name "Stand-up." It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections.

350 CONNECTICUT SEED LEAF-A popular sort with northern and eastern growers on account of its early maturity and extra fine quality. Plants are short and stocky, leaves moderately long of good width, and make excellent filler.

HAVANA-A fine strain of Americanized Havana used for cigars and adding flavor to smoking mixtures.

CHOICE FLOWER SEEDS

With Cultural Instructions and Information.

Prices on ounces and pounds are net; no discount.

Other prices include postage except where noted.

Wonderful and satisfactory results can be obtained from growing flowers from seeds and as a rule there is comparatively little trouble. Some special varieties require particular treatment but most of them can be easily grown and while a few are to be grown in hot beds and transplanted, the majority can be sown in open border or in open beds where they are to bloom, afterwards thinning or transplanting to positions they are to occupy. It is es-sential that the ground be clean, fairly rich and some care taken to keep down weeds, especially when the young plants are first coming up. Sheep Manure will give better results on soil than stable manure because it eliminates weeds and affords all of the elements of plant food necessary to the proper development of flowers.

Flowers from seeds may be divided into three distinct classes:—ANNUALS * BIENNIALS * PERENNIALS and are abbreviated and described briefly as follows:

NNUALS—Producing flowers and seeds the first season from sowing but last only one year as they die in the summer or fall. They sometimes come up year after year from self-sown seeds but as a rule this is not to be depended on. Among them are some of the most beautiful and showy flowers of our gardens and a selection of various sorts will give an uninterrupted succession of display from early summer until late fall.

ANNUALS are divided into three classes:

HARDY ANNUALS (H. A.) which are usually sown in open border the end of March or April, thinning out and transplanting as necessary.

HALF-HARDY ANNUALS (H. H. A.) are usually started in boxes, frames or hot beds and transplanted when the weather is warmer or if sown in open border, delay planting until the ground is fairly warm, say the middle of April to the 1st of May.

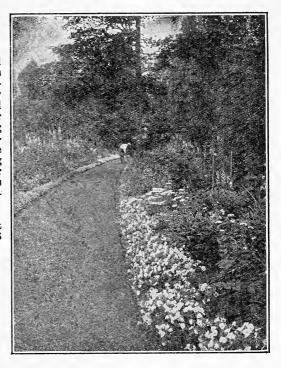
ENDER ANNUALS (T. A.) are still more susceptible to cold and bad weather and should have a little more careful treatment than the other two classes.

BIENNIALS—Biennials are plants which last two years, most of them sown early and bloom the first season and again the fol-lowing season after which they usually die, but some biennials with close cutting are practically perennial. Among them are some of our best border plants which are useful both for the garden display as well as home adornment and wearing.

BIENNIALS are also of three classes:—HARDY BIENNIALS (H. B.); HALF-HARDY BIENNIALS (H. H. B.); and TENDER BIENNIALS (T. B.) The various classes require about the same treatment as for the same classes of Annuals.

PERENNIALS—These embrace a wonderful collection of showy and satisfactory plants. Many of them attain considerable height and are valuable as shrubbery for decoration but the majority are what are called HERBACEOUS Perennials in that they die down to the roots each year and spring up again the following season. In the present day of permanent homes, Perennials are among our most popular flowers as once planted they live for a long time and in laying out gardens and grounds a careful selection of perennials will add the greatest attractiveness and beauty. Perennials should be put in such portions of the garden that they will be permanent and not require removing. If planted in borders a grouping of sorts suitable to the shrubbery and according to height is to be desired. Perennials while usually not blooming until the second year if sown early will generally bloom the first year, especially so if started early in the house. Or seeds can be sown in August and September; thinning or transplanting as desired. They will then bloom the following year.

PERENNIALS may be divided in the same classes as the preceding, which are HARDY PERENNIAL (H. P.); HALF-HARDY PERENNIAL (H. H. P.); TENDER PERENNIAL



(T. P.) and require practically the same treatment as the other two classes

It is desirable in some cases to transplant Annuals, Biennials and Perennials to small pots before planting in the open ground.

SELECTION OF SORTS

In planting mixed borders it is of course desirable to get plants of different heights in their proper position; hence, we have indicated throughout the catalog as far as possible the approximate heights which the different plants attain. Then it is usually desirable to know at about what season the plants bloom and how long they continue so this is indicated by figures 1-2-3. It is of course almost impossible considering various soils, climate, localities and seasons to state accurately the time of blooming as so much depends on the time sown, amount of sunshine and other contingencies, but where such information is stated in the catalog it can be depended on as being approximately right.

RULES FOR PLANTING

Flower seeds are usually small; hence, should never be planted deep. A good general rule is to sow seed at a depth not over 3 or 4 times the diameter of the seed. In very small seed, covering should be very light but the ground should always be firmed down after the seed is sown. Do not attempt to work your garden or border when the ground is wet as it makes it very hard the whole season afterwards. Wait until the ground is in good condition and put it in as fine order as possible. Careful preparation before planting is of as much value as the entire cultivation afterwards. Flower seeds are preferably sown in small rows rather than broadcast and a most effective bed can be made by sowing in rows of different sorts according to heights (allowing sufficient space between rows). Start in the center with tall plants and gradually taper off to small border plants. If the bed is large a Planet Junior Seed Sower will be found excellent for sowing flower seeds but if sown in limited quantities this can be readily done by hand. Sowing in rows allows weeding to be done more easily without pulling up the young plants and if transplanting is to be done the plants can be more readily lifted.

...15c

517

518

GENERAL LIST OF

Choice Flower Seeds

501	Achillea (Ptarmica. "The Pearl")-A hardy
	perennial attaining height of about 2 ft. which bears
	an enormous amount of pure, double, white flowers
	in close heads. It is one of the best plants for cem-
	etery uses and a most decided adjunct to gardens.
	If sown early and transplanted it will flower the first
	season or can be sown later in the open ground.
	2 Pkts25c Pkt

Aconitum (Monk's Hood)—A hardy perennial producing long spikes of blue flowers somewhat resembling Delphinum or Perennial Larkspur. It is better suited to permanent borders and is well adapted to partial shaded or moist situations.

Napellus, Blue-Height 3 to 4 feet. Pkt......10c 502

Acroclinium An "Everlasting," growing about 15 inches high, bearing white or rosy-pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. Half-hardy Annual.

Ageratum (Devil's Paint Brush)—A beautiful hardy annual which bears in dense clusters attractive feathery flowers which are very useful for bouquets or decoration. It grows in bush form and is desirable for outdoor bedding and borders, bearing profusely and covered with blooms nearly all the summer. For earliest blooming can be started indoors or later sown outside.

504	Mexicanum—About 2 ft. high, hardy, bearing light blue flowers. Oz., 40c. Pkt	.10c
505	Imperial Dwarf White—Height 10 inches. Oz., 60c. Pkt	.10c
506	Imperial Dwarf Blue—Height 10 inches. Oz., 50c. Pkt	. 10c

Agrostemma (Rose of Heaven, Mullein Pin't)—An attractive, free-flowering plant of easy culture, producing tiowers on long slender stems, like a single pink. Blooms the first season. Fine for cutting, 1 to 2 feet Hardy Perennial.

Mixed Varieties—Pkt10c

Alyssum—A hardy annual, which is useful for borders, edgings or massing in small beds. It blooms very early and is almost covered with clusters of trusses of small white flowers which are sweet scented having a peculiar, delicate fragrance.

508	Sweet-H	eet—Height about 8		to 10 inches		s but spreading.		40		
	Oz., 40c.	Pkt.	• • • • • •	٠.	• • •	• • •	• • • • • • •	• • • •		. 10
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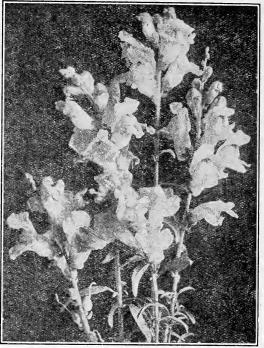
- Tom Thumb—A splendid sort for edges, borders, or rock work. Height about 6 inches. A compact mass of bloom 12 to 15 inches across. Oz., 50c. Pkt......10c 509
- Lilac Queen—Is of dwarf, compact habit and the deep, lavender-like flowers are borne in profusion. Pkt..... 510
- Saxatile Compactum (Basket of Gold)—Showy, bright yellow flowers, hardy perennials; blooms the first season if sown early indoors; excellent for rockwork; 1 foot. 1/2 oz., 25c. Pkt......10c 511

Amaranthus—A class of annuals which are desirable on account of their bright multi-colored foliage. Some of them are valuable for cutting. Tall varieties afford brilliant contrasting colors and as the leaves and stems are usually of different shades, red and green, are unique in many respects.

Tricolor (Joseph's Coat)—Leaves red, yellow and green especially brilliant if grown in rather poor soil. Height 3 ft. Pkt.....

ANTIRRHINUM (Snapdragon)

Well known, showy border and bedding plants of long blooming season. The spikes have curious shaped tubular flowers with spreading lobes and finely marked throats. They are fragrant, brilliant colors and most desirable for cutting in addition to being one of the most ornamental bloomers for garden uses grown from seed. Succeed in any good garden soil, growing 1½ to 2 ft. high, if sown early and transplanted will bloom the first season. H. P.



ANTIRRHINUM

GIANT FLOWERED VARIETIES—(Grandiflora)

Bearing large spikes of enormous flowers in many brilliant

colors. Our strain is extra choice. Queen Victoria—Very handsome, fine white, excellent for cutting. Pkt..... Delilah-Enormous flowers, carmine with white throats. 515

Brilliant Rose—Pkt......10c Giant Yellow—Pkt......10c

GRANDIFLORA MIXED—A select strain of this beautiful flower which comprises the best sorts in many and gorgeous colors. Oz., 80c. Pkt.......10c

DWARF SORTS. 520 521

DWARF MIXED (Picturatum)—A superb strain of blotched, striped, semi-dwarf, growing about 15 inches high; many brilliant colors. Pkt.............10c

Ampelopsis Veitchii (Boston Ivy)

AQUILEGIA (Columbine)

One of the most pleasing of hardy perennials which is very desirable, easily grown and excellent for borders. It is an old-fashioned perennial, forming large permanent clumps which bloom profusely early in the season and remain in bloom for a considerable period. Flowers are of peculiar shape, pendant, exquisite form, often with long spurs.

Seed is somewhat slow in germination. Can be sown in boxes early or in open border in March and should be transplanted to permanent beds at least one foot each way. If desired seed can be sown in the fall. H. P. Height 2 to 3 ft.

We offer Single Aquilegia only as do not consider double sorts desirable.

sorts desirable.

522 M LONG SPURRED HYBRIDS—The most beautiful with LUNG SPURKED HTBRIDS—I he most beautiful collection of long spurred Aquilegia which have been wonderfully developed and comprise brilliant and showy flowers from purest white through yellows, pinks, blues, purples and other shades. 1/2 oz., 75c. Pkt.

ARABIS (Rock Cress)

Alpina—A hardy perennial and one of the earliest and prettiest spring flowers. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequalled for rockeries or edging; withstands the drought and is always neat; 6 inches. Pkt.

ASTER

One of the most satisfactory of all annuals and unsurpassed for bedding, cutting and decoration. Asters are in many and diversified sorts, comprising various sizes, colors and forms. They bloom usually in mid-summer at a time when good cutting flowers are scarce. Plants are of vigorous growth and hardy, sometimes standing slight frost without serious injury. We recommend that various sorts be sown for blooming at different seasons. They can be easily grown without the assistance of hot bed. For earliest blooming, seed should be started in boxes or hot beds or little later they can be sown in beds in the open and transplanted where they are to bloom, allowing

from one to one and a half feet between plants. Sheep manure will give good results on Asters and should be mixed with the soil before the plants are set out. We do not recommend Asters to be planted in the same soil two seasons as sometimes they suffer from disease on this account.

Our strain comprises the best of classes and of most select stocks. We advise sowings of earliest as well as late sorts for a succession of bloom.

INSECT REMEDIES—For the black bug which sometimes eats the flowers, spray with a solution of Hellebore in water, or Paris Green in water, at the rate of a heaping half teaspoonful to two gallons of water.

OUEEN OF THE MARKET

A very desirable sort blooming extremely early and bearing profusely. It has a wide range of colors and is fine for cutting and extensively used under glass. Plants are 16 to 18 inches high, of compact, branching habit and bear 10 to 15 flowers which are somewhat flat in shape with straight petals.

524	White—Very early, double, fine form. Pkt	. 10c
525	Rose—Pkt	. 10c
526	Light Blue—Pkt	.10c
527	Dark Blue—Pkt	. 10c
528	MIXED COLORS—Comprising all shades blended in splendid proportions. 1/4 oz., 35c. Pkt	. 1 Oc

BEAUTY ASTERS

A recently developed late flowering strain coming into bloom in late September, and being at their best through October, the plants grow nearly 3 feet high, and bear their very large, densely double flowers on long strong stems. We offer three beautiful colors.

529	American Beauty—Bright cerise-rose. 2 Pkts., 25c. Pkt15c
530	Lavender Beauty—Soft lavender. 2 Pkts., 25c. Pkt15c
531	Purple Beauty—Rich deep purple. 2 Pkts., 25c. Pkt15c
532	White Beauty—Giant white. 2 Pkts., 25c. Pkt15c
533	Finest Mixed—1/4 oz., 75c.; 2 Pkts., 25c. Pkt15c

IMPROVED VICTORIA (Daybreak Type)

An early flowering strain of very large flowered Asters. Flowers are sometimes 3½ inches across over half of the center with broad thick petals which curve outward. They overlap so regularly as to resemble a double Dahlia. Plants grow about 15 to 18 inches high and are bushy and prolific. Our strain is finest imported stock and comprises brilliant colors, both sep arate and mixed.

534	white—Very handsome flowers, excellent for cutting.
	1/4 oz., 75c. 2 Pkts., 25c. Pkt
535	Rose—A delicate shade of light pink and very hand-
	some. 1/4 oz., 75c. 2 Pkts., 25c. Pkt
536	Crimson-A glowing brilliant crimson. 1/4 oz 75c.
	2 Pkts., 25c. Pkt
537	Light Blue-Very large, bright light blue. 1/4 oz.,
	75c. 2 Pkts., 25c. Pkt
538	Dark Blue—Purplish blue, very brilliant. 1/4 oz., 75c.
	2 Pkts., 25c. Pkt
539	MIXED-A wonderful mixture comprising all shades
	including those listed above and many others. 1/4 oz
	50c. Pkt10c

GIANT BRANCHING COMET

A giant flowered Aster growing 18 inches to 2 ft. high and bearing enormous double flowers with broad petals outcurved. Fine exhibition sorts. This is finer than the Giant Comet or Ostrich Feather being larger, petals much longer and more curled and twisted. It blooms early and extends over a considerable

540	White—Enormous, double white flowers with broad twisted petals. ½ oz., 50c. Pkt
	Rose-Brilliant, lively pink. 1/4 oz., 50c. Pkt10c
542	Light Blue-Handsome flowers. 1/4 oz., 50c. Pkt10c
543	M!XED—Comprises all shades. Fine stock. ¼ oz., 40c. Pkt



VICTORIA ASTERS

CREGO

Another of the largest and most beautiful Asters having double flowers which have long, twisted petals. Plant is branching, very vigorous. Flowers are borne on long strong stems. It blooms in mid-season and is highly commended among commercial growers. -Glistening nurs white of enormous size

0 1 1	white choicing pure white of choimous size.
	Petals grow so thickly, showing nothing of the cen-
	ter. One of the best for cutting. 1/4 oz., 50c. Pkt 10c
545	Giant Pink-A beautiful soft pink of large size.
	Petals curled and twisted. 1/4 oz., 50c. Pkt 10c
546	MIXED—Pkt

CHINA ASTERS

A mixture of fair strains which will give good satisfaction for general purposes. 547 Finest Mixed Colors—Oz., 75c. Pkt......10c

HARDY PERENNIAL ASTERS

548 Mixed (Michaelmas Daisies). Single fall-flowering hardy herbaceous plants, thriving in any good garden soil. If sown early they will flower the first season; 3 feet. Pkt...........10c

ARCTOTIS (African Daisy)

549 Grandis—Forms much branched bushes 2 to 3 feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue; blooms early in July and continues until hard frost. It delights in a sunny situation. Half-hardy Annual. Pkt.....

Asparagus

Highly prized for very finely cut foliage which is used in decoration and in making of bouquets and designs. Valuable for conservatories and sometimes used in hanging baskets, being ornamental and trailing. Seed should be soaked in warm water before planting and when plants are large enough to handle. transplant to where they are to grow.

SPRENGERI-Sprays 3 to 4 ft. long, light green.10c Pkt..... Plumosis—Very finely cut, feathery foliage; highly prized and ornamental; light green. Pkt......

BALSAM (Touch-Me-Not or Lady's Slipper)

An old fashioned flower which is generally popular in all gardens. It bears flowers of various shades, white, pink, red, yellow, purple, etc., some of which are beautifully striped and spotted. It is a tender annual which can be sown in open border; blooms early, or sown in house and transplanted if desired. Grows about 1½ to 2 ft. high, makes erect bushy plants and rich soil is required in producing the finest blooms.

DOUBLE MIXED-Pkt.......10c

DOUBLE CAMELLIA FLOWERED WHITE—Splendid for florists or bouquets. Very double. Pkt..... 553

BALSAM PEAR or APPLE—See page 64.
BALLOON VINE—See page 64.
BACHELORS BUTTON—See Centaurea.
BLACK EYED SUSAN (Thumbergia)—See page 65.

Begonia, Vernon

A tender Annual, producing large masses of bright, rich, red flowers, which are set off by abundant glossy green leaves, broadly margined with bronze or purple. The plant is very effective whether in bloom or not. It is hardy, very free flowering and excellent for pot culture or bedding out in partially shady locations. Suitable also for window boxes.

The seed is extremely small, hence should be sown very shallow and kept moist with mulch until germination. Transplant as soon as large enough to handle to small pots.

Bellis Perennis (English Daisy)

A well known dwarf growing plant which bears massy and very double aster-like flowers. It is very useful for borders or growing for cut flowers. Plants are about 6 inches high and bear in greatest profusion. The seed is usually sown in August and as it is a half-hardy Tusion. The seed is usually sown in August and as it is a han-halfy perennial, will with a little protection stand the winter. It can also be sown in the spring.

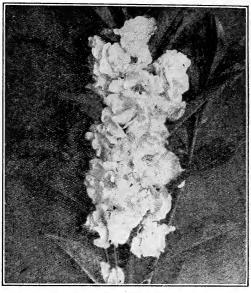
The Bride, or Improved Snowball-Fine large double free-flowering pure

white. ½ oz., 75c. Pkt.

DOUBLE MIXED—Large, double flowers, various shades pink, red, white and other colors. ½ oz., 50c. Pkt.



COREOPSIS LANCEOLATA GRANDIFLORA



BALSAM, CAMELLIA FLOWERED WHITE

Browallia

A free blooming plant producing masses of bright blue flowers which continue in bloom during the summer and autumn. Grows about 6 to 8 inches high. H. H. A. 557 MIXED-Various shades of blue. Pkt...........10c

CALCEOLARIA An ornamental plant, producing a mass of beautiful, pocket-like flowers in the spring, and a universal favorite for decorating the greenhouse or conservatory. Flowers beautifully spotted and blotched in exceedingly rich and varied colors. Pkt.

CALENDULA (Pot Marigold)

A hardy annual, which will grow and succeed in almost any garden. It produces a brilliant effect in beds and bor-ders, being extremely free blooming and commencing early and continuing in greatest profusion until frost.

Orange King—A beautiful rich orange. Full double flowers, borne abundantly throughout the season. Oz. 25c. Pkt....10c

METEOR — Beautiful, imbricated, very large, double flowers. Petals light yellow, delicately edged with orange. Desirable for beds, borders and back-ground. Height, 2 ft. Oz., 25c

PRINCE OF ORANGE—A very distinct variety, has large, double, golden yellow flowers. Petals shaded, dark orange. Produces in great abundance. Grows about one foot high. Valuable for borders and edgings. Oz., 25c; Pkt......10c

CALLIOPSIS OR COREOPSIS

Annual Sorts

Perennial

LANCEOLATA GRANDIFLORA—A hardy perennial blooming the first year from seed and producing on very long stems a constant succession of rich, bright yellow flowers, 2 to 3 inches across. Highly desirable and ornamental for borders or beds and exceedingly valuable for cutting and decorating purposes. Can also be sown in the fall outdoors. Oz., 60c. Pkt........10c

CANNA

A well known ornamental plant of semi-tropical appearance which is largely planted in beds in groups and masses and as a background for other plants. It is usually grown from roots but good results can be obtained from seed if properly treated. As the seeds are very hard it is better to cut a small notch in them and soak in warm water for 24 hours before planting. It should be stored in horse and are replaced to the second for the be started in boxes or under glass and transplanted to open ground after the

CANTERBURY BELLS (Campanula)

A hardy, herbaceous biennial, of branching growth which blooms profusely. It is excellent for beds and backgrounds, producing long racemes of bell or saucer shaped flowers of rich colors which are very effective and valuable for cutting.

Seed can be started early indoors, or sown in the fall. Height 2 to 4 ft.

CALYCANTHEMA (Cup and Saucer)—Large single flowers; white, lilac, rose and purple. One of the best sorts. Pkt..... SINGLE MIXED—Comprises all shades. white, lilac, blue, violet, rose, etc. Pkt.................10c 568

CARDINAL CLIMBER, see page 64.

CANARY BIRD FLOWER, see page 64.

CANDYTUFT

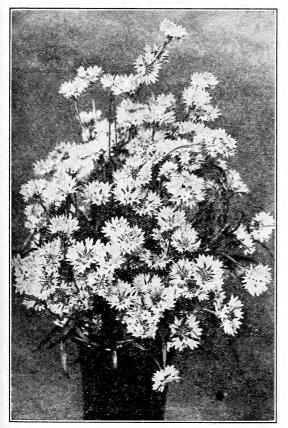
Hardy Annuals growing 12 to 15 inches high, of branching habit and producing in profusion large clusters of flowers which are splendid for cutting. They are excellent for borders or to plant in masses; also can be used for rockeries.

GIANT HYACINTH-FLOWERED OR IMPROVED EMPRESS—A wonderfully improved strain of the popular Empress Candytuft, forming much branched plants about 18 inches high, each branch terminated by an immense spike of very large individual pure white flowers. Makes a very effective white hold on headen and in involve his castistic. we white bed or border, and is invaluable for cutting. Oz.,

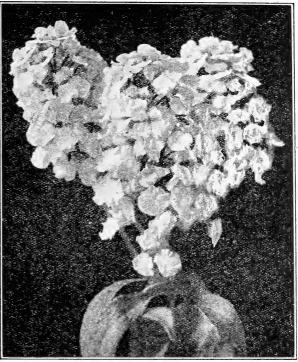
CRIMSON-LAVENDER-

CARNATIONS

CELOSIA OR COXCOMB—An extremely ornamental summer bedding plant, bearing large comb-like purplish red



CENTAUREA CYANUS



GIANT HYACINTHED FLOWERED OR IMPROVED EMPRESS

Seed can be started in boxes and transplanted or sown later in open ground. Haif hardy annual.

574 GOLDEN PLUME. Pkt.

575 GLASGOW PRIZE—Dwarf growing and bearing immense deep purplish red combs; foliage dark but not abundant.

(Called Corn Flower, Ragged Robin, Bachelor's Button, etc.) Free flowering hardy annuals which are graceful and showy garden flowers. Flowers are borne on tall, slender or slightly branching plants with narrow leaves and comprise many bright colored single

plants with narrow leaves and comprise many bright colored and double heads on long stems.

577 EMPEROR—A beautiful sky blue sort which is exceedingly effective and attractive. Oz., 35c. Pkt.

578 MARGUERITE—Sweet scented, producing large white flowers on long stems; excellent for cutting. Height about 18 inches. Pkt.

579 MIXED—Comprising various snades, blue, purple, white, pink, etc. Oz., 30c; Pkt. ..100 .10c

581

CINERARIA (Hybrida)

This pretty and easily grown annual has been much improved in recent years, and the mixture offered below is now seen as cut flowers in most of the large cities of Europe; they do well either in sun or shade, growing 2 to 2½ feet high, with leafy racemes of double flowers, which all open in water when cut.

583 ELEGANS DOUBLE MIXED—A fine mixture containing all the colors. Pkt..... COLEUS

CHRYSANTHEMUM

The annual Chrysanthemums bear little resemblance to the perennial or fall blooming varieties and have a beauty and attractiveness all their own. They are valuable border plants excellent for cutting and comprise many brilliant shades. Bloom very early and will become more bushy if pinched back in early growth. Seed may be sown in open ground or started earlier indoors. Height 1½ to 2 feet.

ANNUAL VARIETIES

585	EVENING STAR (Called Corn Marigold)—Flowers of pure golden yellow sometimes three inches across and resembling in general appearance the Yellow Paris Daisy.	
	Excellent for cutting and salable both in spring and fall. Pkt	. 16c
586	NORTHERN STAR—Pure golden yellow with broad purplish scarlet rings on petals, center dark blue; very beautiful and striking. Pkt	. 10c
587	BRIDAL ROBE (Double)—The plants grow about 12 inches high, and are covered the entire summer with their beautiful snow-white double flowers. Pkt	. 10c
588	MIXED—A mixture of best annual sorts. Pkt	. 10c

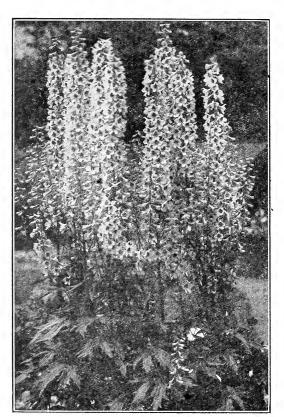
COSMOS

A hardy annual, which is one of the most beautiful and effective of autumn A hardy annual, which is one of the most beautiful and effective of autumn flowering plants and bears in greatest profusion large flowers having a single row of long petals around yellow centers. Colors vary from purest white through various shades of pink and crimson. Some of them attain large size, being 3½ to 4 inches in diameter. Plants grow 4 to 7 feet high, have finely cut foliage which is very ornamental and form excellent backgrounds in beds. Flowers are borne on long slender stems and are excellent for cutting and decoration. It is a very easy plant to grow. Seed can be started early if desired and transplanted or sown in open border where they are to bloom, thinning to 6 or 8 inches apart.

GIANT FLOWERED COSMOS-These produce enormous sized flowers, rich and varied colors, and is one of the best strains for show Cosmos.

589	Giant White—1/4-oz., 25c. Pkt
590	Giant Crimson—1/4-oz., 25c. Pkt
	Pink Lady Lenox—A beautiful shade of shell pink, early blooming and very large flowers.

COSMOS—EARLY FLOWERED—These attain a height of about 4 ft. and bloom very profusely. They are 4 to 6 weeks earlier than the Giant sorts or old fashioned varieties. Flowers are not so large but as they bloom earlier are particularly adapted for late, sowing or in northern latitudes where the season is short.



DELPHINIUM BLACKMORE AND LANGDON'S HYBRIDS



594 Early Flowered Crimson— $1\!\!/_4\text{-}oz.,$ 25c. Pkt..... 10c

596 Early Flowered Mixed—A choice mixture. 1/4-oz., 20c. Pkt.....10c DOUBLE COSMOS

Mixed—One of the best novelties of recent years. These varieties produce full, round, double flowers on sturdy, bushy plants, blooming in late summer and autumn. Finest mixed, pkt......10c CYPRESS VINE (See page 64.)

CONE FLOWER (Rudbeckia)

Showy, free-blooming, fine for cutting. 598

Cyclamen

601 Persicum Giganteum Mixed-One of the finest strains of large flowered English Cyclamen which comprises the best shades and colors, varying through the various shades of white, pink, crimson, and dark red. Pkt....35c

Delphinium (Perennial Larkspur)

Very ornamental hardy perennials which are extremely attractive for borders or beds of shrubbery. It has long clustered spikes of beautiful irregular flowers often with long spurs and its beautiful shades of blue are very much admired. Our strain of Delphinium is particularly choice quality, comprising largest blooms and with the widest range of colors. We do not offer ordinary cheap strains at all. Seed can be sown early indoors and transplanted or in open border where they are to bloom, afterwards thinning to 1 to 1½ feet apart or seed can be sown in August and September where they are to bloom and thinned out the next spring. Height 3 to 5 ft.

BLACKMORE & LANGDON'S HYBRIDS-This collection of Delphiniums is one of the finest in England. The seed we offer is saved from their choicest varieties. 1/202., \$1.00; 3 Pkts., 50c. Pkt...........20c.

604 BELLAMOSUM-This is a rich, deep blue form of the popular light 605 FORMOSUM-Beautiful spikes of rich blue flowers, with a white

centre. Pkt....

(See also ANNUAL LARKSPUR)

ORDER SHEET

THE J. CHAS. McCULLOUGH SEED CO.

228-230-232 East Fourth St., Near Sycamore - Cincinnati, O.

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Dahlia

A popular autumn flowering plant which will bloom the first season from seed if started early. Dahlias are well known and hardly need description. They are very free flowering and bulbs can be lifted in the fall and saved through to the following spring if kept in a place where they will not freeze. Many sports and new varieties are obtained from seed and they can be sown early in the house or greenhouse and transplanted when large enough to pots and set in the open ground when the weather has become settled and warm. Tender herbaceous perennials, 3 to 4 ft. high.

606	Peony Flowered-Mixed. 2 Pkts., 25c. Pkt	15c
607	Cactus Flowering—Finest mixed. 2 Pkts., 25c. Pkt	15c
608	Single Mixed—An extra fine strain producing brilliant flowers running through a wide range of shades. Pkt	10c
609	Finest Double Mixed—Saved from choicest double flowers including shades of red, pink, maroon, yellow, white, etc. Pkt	10c

(For DAHLIA ROOTS, see SUMMER FLOWERING BULBS.)

Daisy

ENGLISH—See Bellis Perennis.
ORANGE RIVER—See Dimorphotheca.
PARIS—See Chrysanthemum, Perennial Varieties.
SHASTA—See Shasta Daisy.
AFRICAN—See Arctotis.

DIANTHUS—(Pinks)

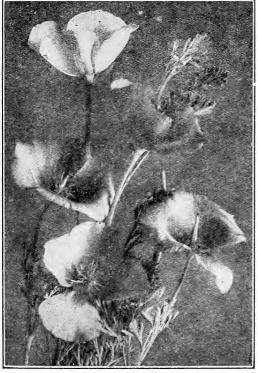
Many beautiful and profitable flowers are comprised under this heading, such as Carnations, Sweet William, etc., but the varieties we offer below are mostly hardy annuals. They are old-fashioned favorites, blooming profusely and suitable for bedding borders and cutting. Stems are of good length and strong; colors are brilliant and often sweet scented. Grow about 1 ft. high.

CHINENSIS FI. Pl. (Double China Pink)—A mixture of double pinks comprising white to dark crimson shades and including purple and darker blotchings. They are unsurpassed in varieties and brilliant colorings. Pkt..... HEDEWIGGI (Single Japan Pink)—A splendid mix-ture of single flowers of brilliant shades, brilliantly marked. Plants dwarf and very free flowering. 611

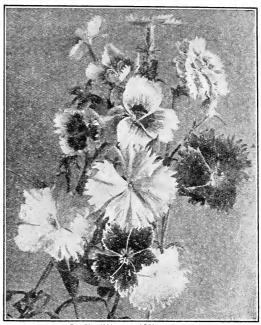
HEDEWIGGI, Fl. Pl. (Double Japan Pink)—Very double with deep fringed petals. Colors vary from white to rose, lilac, carmine, crimson, scarlet, purple, brown and almost black, spotted and striped. Pkt....10c

HARDY PERENNIAL PINKS.

Plumarius (Pheasant's Eye Pink)—A semi-double hardy variety clove scented. Flowers blush white shaded with deep crimson and maroon. Pkt.......10c



ESCHSCHOLTZIA CALIFORNICA



DIANTHUS--VARIOUS SORTS

DIDISCUS (Lace Plant)

This valuable flower deserves large cultivation for florist use. Flowers in clusters, borne on long, stout stems. General appearance not unlike lace and is often referred to as "Lace Plant". Plants about 18 inches high. 614 Coerulea-Light blue. Pkt.....

DIGITALIS (Foxglove)

Handsome and highly ornamental hardy plants of stately growth, succeeding under almost all conditions, and with but little attention will give a wealth of flowers during June and July. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half shady places; 3 to 5 feet.

Gloxiniaeflora—This is a fine strain of the ordinary Foxglove D. purpurea, with handsome spotted Gloxinia-like flowers on long spikes.

615	White.	Pkt	 	 100
616	Purple.	Pkt	 	 100
		/ * 0,		

DIMORPHOTHECA AURANTIACA

(African or Orange River Daisy)

ESCHSCHOLTZIA (California Poppy)

EUPHORBIA

Hardy annual growing about 2 feet high. 624 HETEROPHYLLA (Mexican Fire Plant)—Flowers formed in

EVERLASTING FLOWERS

See ACROCLINIUM, GOMPHRENA, HELICHRYSUM, RHODANTHE, XERANTHEMUM.

Four O'Clock (Marvel of Peru)

Old-fashioned flowers which are borne on erect, bushy plants, 2 to 3 ft. high. Flowers are large tube shaped, opening in the afternoon and remaining open all night, and close again in the morning. Very desirable for borders and backgrounds for lower growing plants. Seed can be started early and transplanted if desired, or planted in open borders 2 to 3 ft. apart, thinning to one plant. H. A.

FORGET-ME-NOT—(See Myosotis) Page 56.

FOXGLOVE—(See Digitalis) Page 53.

GAILLARDIA

ANNUAL VARIETIES

A splendid class of showy bedding or border plants which produce in greatest profusion daisy-like flowers 2 to 2½ inches across, comprising mostly yellow and red shades. Blooms are borne on long stems well above the foliage and are excellent for cutting. Single varieties somewhat resemble in shape miniature sunflowers, while the double form dense heads. Height 1 to 1½ Seed may be sown early in the spring, thinned out or transplanted.

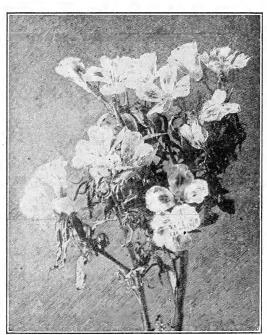
Lorenziana Picta—Gaily colored flowers which are double, and have tubular petals. They bloom profusely from July until frost; splendid for cutting. Colors: yellow, orange, wine and claret. Plants grow 1 to 1½ ft. in height and will usually bloom the full season.

HARDY PERENNIAL VARIETY

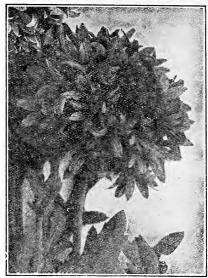
M Hybrids (Grandiflora) — A beautiful hardy perennial blooming the first season from seed. Flowers often 3 inches across with flat petals and comprising mostly orange and scarlet shades. This is the most beautiful strain of hardy Gaillardia ever offered and 628 comprises the most gorgeous and brilliant shadings and colors. Pkt....

GERANIUM (Pelargonium)

The heads of gorgeous flowers, of many shades of color, borne continuously, render this one of the most popular plants grown, either for pot culture in winter or for bedding out in summer. Tender Perennial. Single Large Flowering—Mixed. Pkt......10c



EGODETIA THE BRIDE



GAILLARDIA LORENZIANA

Globe Amaranth (Gomphrena)

GYPSOPHILA (Baby's Breath) HARDY PERENNIAL

Pretty free-flowering plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut

Elegans Grandiflora Alba—This is an improved large flowering, pure white form of the annual Baby's Breath. Half-hardy Annual. Oz., 20c. Pkt.

632 Elegans Delicate Pink—A pretty blush pink form of the above, and equally as valuable for cutting. Oz., 25c. Pkt.....

Paniculata—White flowers, fine for bouquets; blooms first year if sown early. Hardy Perennial. Oz., 40c. Pkt.....

GODETIA

A hardy annual, growing 1 to 1½ ft. high which is one of the most attractive of garden plants for bedding and borders. The flowers are borne in short close spikes on leafy branches which produce very freely. They are single, of delicate shadings and satiny texture. Included in this class of plants is the Evening Primrose.

Seed can be sown outdoors where they are to bloom or if wanted early, start in hot beds. Can be used as pot plants as well as for bedding.

GOURDS-See page 64.

HELICHRYSUM (Straw Flower)

A hardy annual of the easiest culture; one of our best "Everlasting" flowers, the dried double bloom being very handsome in Winter bouquets. 2 feet.

HIBISCUS (Rose Mallow or Marsh Mallow) HARDY PERENNIAL

Free blooming and desirable plants, 2 to 5 feet; producing flowers of great size, brilliancy and beauty, often 10 inches across-

636 HARDY MARVEL—Showy, ornamental shrub, growing to a large size and blooming the first year from spring-sown seed. Hardy as an oak and will thrive in any soil. The flowers often measuring 8 to 10 inches across, are gorgeous in colors, and bloom in great profusion from late July to frost. Mixed colors. Pkt...

HELIOTROPE

A well known and popular class of tender annuals which are largely used as border and bedding plants and quite frequently grown in the house for winter blooming. They have a sweet odor resembling cherry pie. Flowers are blue, purple and white, borne in clusters.

Seed must be started early in the house, in shallow boxes and transplanted and moved to the garden after danger of frost. They are well adapted for partial shady situations and bloom continuously until frost.

HOLLYHOCK

Upright and hardy perennials which are well known. They are largely used as a background for other plants or as a screen, attaining a height usually of 5 ft. The rich double blossoms range from deep yellow, white, pink, red, purple. etc., are

The seed we offer produces the best double blooms resembling rosettes. Hollynocks can be sown in open border, transplanting when the plants are large enough to a
permanent position, setting 1½ to 2 ft. apart. They bloom the second season. Seed
can also be sown in August.

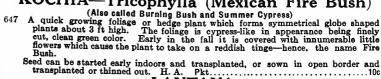
638	DOUBLE WHITE —An improved strain producing perfect double flowers. 1/4-oz., 75c.
	Pkt
639	DOUBLE PINK—Soft rose color changing to darker pink with age. 1/4-oz., 75c. Pkt. 10c
640	DOUBLE SCARLET—Very brilliant. 1/2-0z., 75c. Pkt.
641	DOUBLE YELLOW—A bright lemon color. \(\frac{1}{4}\)-oz 75c. Pkt.
642	DOUBLE MIXED—Comprises all shades. 1/4-oz., 50c. Pkt
643	ALLEGHENY—Flowers are distinct, having edges of the petals finely fringed. They
	are large size, come fairly double, and are usually valuable on account of the fringed
	appearance of the petals. Our strain comprises a good range of soft rich colors, \(\frac{1}{4}\)-oz.
	40c. Pkt
644	
0-1	ICE PLANT—See page 65.
	JAPANESE HOPS—See page 65.
	and interest the control of the cont

IBERIS (Hardy Candytuft)

SEMPERVIRENS—A profuse, white-blooming, hardy perennial, coming in flower early in the spring; much used for cemeteries, rockeries, etc. 1 foot. ½-0z., 60c. Pkt..10c

JOB'S TEARS

KOCHIA—Tricophylla (Mexican Fire Bush)



LANTANA

LARKSPUR—ANNUAL

LATHYRUS LATIFOLIUS

(Everlasting, or Hardy Sweet Pea) Showy, free-flowering hardy perennial climbers for covering old stumps, fences, etc., continually

LINARIA

CYMBALARIA—See Kennilworth Ivy, Page 65.

LINUM (Flax)

LOBELIA

- 655 Chrystal Palace. Pkt...... LUPINUS
- LUPINUS (Perennial Varieties)
- 657 [Polyphyllus Mixed-Pkt...

MIGNONETTE

A popular hardy annual producing dense, cone shape spikes made up of thickly set flowers, yellow,



KENILWORTH IVY-See page 65.

EN'S DEFIANCE MIGNONETTE

Machet—Large spikes, reddish-tinted. 1/4-oz., 25c Allen's Defiance—An excellent variety for cutting.

MARIGOLD

A very popular old-fashioned garden annual which is remarkable for its brilliant display of yellow and orange flowers which are borne in greatest profusion from early summer till frost. The African varieties are tall, usually 2 to 3 ft. high and well adapted for large beds, backgrounds or mixed borders. The French are more dwarf and can be used for borders and bedding. All varieties have finely cut, bright green foliage.

Seed can be sown in open border where they are to bloom or if desired started early in the house, but there is no special advantage. According to whether tall or dwarf they should be planted from one foot to 18 inches apart in rows $1\frac{1}{2}$ to 2 feet apart.

AFRICAN VARIETIES

660	African Double Orange—Flowers about 3 inches in diameter imbricated and extremely double, in tints of primrose, orange and gold. Grows 2 to 3 ft. high. 4-oz., 25c. Pkt10c
661	African Double Lemon—Profuse bloomers, one of the best of the class. Desirable for shrubbery or mixed borders. 4-oz., 25c. Pkt10c
662	African Double Mixed—Comprises various shades and well adapted for large beds or mixed borders. \(\frac{1}{4}\text{-oz.}, \) 20c. \(\text{Pkt} \tag{-cs.} \)
	FRENCH VARIETIES
663	French Double Mixed—Comprising all shades of yellow, orange, brown, striped, etc. Very double. Height, 1 ft. to 18 inches. 4-oz., 25c. Pkt10c
664	Legion of Honor (Little Brownie)—A single flowering Marigold, forming compact bushes 9 inches high. Begins flowering early, commencing in June, continuing until frost. The flowers are golden yellow, marked with a large spot of velvety crimson at the base of each petal. 14-oz., 25c. Pkt
	MIMULUS
	Fine for shady situations; blooming the first year

from seed if sown early; 1 foot. Half-hardy Perennial.

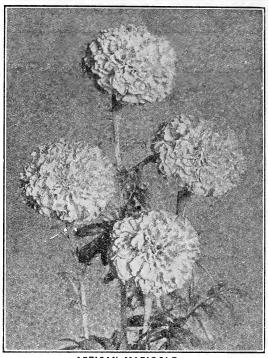
MORNING GLORY—See page 65.

MOON VINE—See page 65.

Tigrinus—(Monkey Flower.) Fine mixed spotted varieties. Pkt...............10c



NASTURTIUMS. VARIOUS SORTS



AFRICAN MARIGOLD

MYOSOTIS (Forget-Me-Not)

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Perennials and hardy if given slight protection through the winter. Seed may be sown any time from spring till mid-summer. The Alpestris variety comes into bloom in April, and are largely used for bedding or borders in connection with spring flowering bulbs, Pansies, etc. The Palustris sorts do not bloom till May, but continue till fall.

75c. Pkt.....

NASTURTIUM

One of the most popular of tender annuals which is valuable alike for bedding, borders and cutting. Few plants are more easily grown or remain longer in bloom. Flowers are in many brilliant shades ranging from creamy white through rose, light pink and scarlets together with yellow, orange, brown, maroon, etc., and many flowers are brilliantly spotted. Blooms abundantly from early summer until late fall.

Seed is usually sown outdoors as soon as the weather is settled. If desired can be started in the house and transplanted.

TALL VARIETIES

These are excellent for growing in beds and borders where there is plenty of room for trailing or for light trellises and for hanging baskets, vases and window boxes. Height usually 4 to 5 ft.

9 Tall Mixed—Comprises all shades in splendid mixture. Oz., 20c; ¼-lb., 50c; pkt.................10c

NICOTIANA

(Sweet Scented Tobacco Plant)

The blossoms in shape are not unlike a Petunia blossom, but with a longe tube. The flowers open toward evening and emit a powerful perfume. H. A
670 Affinis—Large, pure white flowers of delicious fragrance. If taken up in the fall, cut back and potted they will bloom all
winter. Pkt
671 Sanderae Hybrids—A showy and profuse flowering, half-hardy annual, giving a continuous display of brilliant flowers through summer and autumn. The plant is of branching, bushy habit, 2 to 3 feet high, and carries the flowers in clusters. The flowers measure from 1 to 2 inches across and remain open all day.
Many colors, mixed. Pkt10

NIGELLA

(Love in a Mist, or Devil in the Bush.)

672	Miss Jekyll—Lovely variety giving an abundance of long- stemmed flowers which are of a clear cornflower-blue, prettily set in slender elegant foliage. One of our most attractive annuals. The plants are extremely hardy, and an autumn sowing produces the best specimen for flowering in the follow- ing summer. Height, 18 inches. H. A. Pkt	.100
673	Finest MixedPkt.	10

PANSIES

One of the most charming of all hardy annuals and deservedly popular. Their modest flowers of brilliant colorings, markings and shades are produced extremely early in the spring and when the weather is not too hot, continue to afford a mass of bloom until mid-summer. There is almost an infinite variety of colors.

The old strains were confined to a few flowers of moderate size but in the improved sorts, which we offer below, there is a wonderful improvement from the old-fashioned Heart's Ease.

Seed is usually sown in the fall, wintered over in cool frames and plants transplanted to beds when in bloom very early in the spring.

Seed, however, may be started early in the spring, transplanting to where they are to bloom as soon as the plants are fairly large. Our strain embraces many choice sorts and mixtures as well as the best sorts in separate colors.

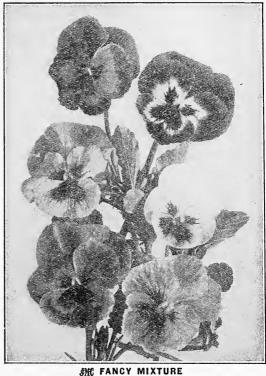
sur c	as well as the best set as in separate colors.
674	### FANCY MIXTURE—A particularly fine strain comprising all the best shades and brilliantly marked. It is one of the most effective and largest flowered sorts and the flowers are of good substance on stiff stems. Plants are thrifty and extremely free flowering. When properly grown it is of faultless form and wonderfully large. ##################################
675	BUGNOT'S MIXED—A very large stained sort of exceptionally fine quality; most of the flowers being blotched or stained, each petal is marked and the margins usually veined. Many brilliant colors. 1/2-oz., 75c; 2 Pkts., 25c. Pkt
676	Azure Blue—Velvety violet-blue. Pkt
677	Madam Perret—Extra fine mixture, containing many shades of red. Pkt
678	Yellow Giant-Brilliant golden yellow with black eye. Pkt10c
679	Giant King of Blacks—Brilliant shiny black, almost coal black. Pkt
680	Giant Lord Beaconsfield—Purple violet shading to light blue on the upper petals. Pkt
681	Giant Snow-Flake—Pure sating white. Pkt10c
682	Orchid Flowered—Light shades with frilled flowers. New. 2 Pkts., 25c. Pkt
683	Masterpiece (Frilled Pansy)—A remarkable type, each petal being conspicuously curled or waved. The range of color is very extensive, the rich, dark, velvety shades predominating. 2 Pkts., 25c. Pkt
684	Giant Trimardeau Mixed—Flowers are of many brilliant shades, including the above sorts and a score of others. Most flowers have brilliant markings and blotches. On account of its large size and thrifty habit, this is one of the most popular strains for commercial uses. ½-oz., 40c. Pkt 10c
	ALIAIA ALIVER DALIAI

PETUNIA

685 CHOICE MIXED PANSY—A good English strain, comprising many shades and colors. The flowers are fairly large size, well marked and very free blooming. 1/4-oz., 25c. Pkt.....10c

One of the most desirable half-hardy annuals for bedding and particularly effective if massed. It is also desirable for window-boxes or vases.

For earliest blooming outdoors, seed is started in shallow boxes and shifted to pots, then transplanted to beds. Or seed may be sown in open border where they are to bloom; thinning out as necessary or transplanting, usually allowing about 1 ft. to 18 inches between plants.



686-	Rosy Morn—Soft carmine-pink with white throat; makes a very dainty and at the same time effective border. ½4-oz., 75c. Pkt
687	General Dodds—Velvety dark red, nearly black; a scarce color among Petunias. Dwarf, compact bushes. 2 Pkts., 25c. Pkt15c
688	Howard's Star—This grand petunia has flowers 2 to 2½ inches in diameter, of fine texture, with more or less veining. Ground color a crimson maroon. In the centre of each flower is a five-rayed star of light blush pink or white. Height of plant, 1½ to 2 feet. Pkt
689	Ruffled Glants—An improved strain of California Petunias, flowers often measuring 3 to 4 inches across. Its colors comprise all shades from purest white through rose, pink, carmine and purple. Most of the flowers are brilliantly marked, veined and fringed. Pkt
690	Giant of California—Flowers very large, in great variety of colors and markings, with deep yellow throats. 2 Pkts., 25c. Pkt15c
691	Choice Single Mixed—A fair mixture of good coloring which bear moderately sized flowers and externely free flowering. Oz., 75c. Pkt
692	Double Fringed Mixed—Many brilliant colors; flowers beautifully fringed. Pkt
	BALCONY PETUNIAS

******	A splendid large and free flowering type either for window boxes, hanging baskets, etc., the flowers average 3 inches across and make a	
	effective display over a long season.	
693	Balcony Blue—Velvety indigo blue. 2 Pkts., 25c. Pkt15c	
694	Balcony Rose—Brilliant rose-pink; very effective. 2 Pkts., 25c. Pkt	
695	Balcony White—The pure white form. 2 Pkts., 25c. Pkt15c	
808	Ralcony Crimcon_Pich volvety crimcon 2 Plete 25c Plet 15c	

PHLOX

One of the most pleasing classes of Hardy Annuals and Perennials which are deservedly popular as they are unexcelled in a magnificent display of their many and brilliant colored flowers. They grow in somewhat bush-like form and with many broad flat top clusters of nearly round flowers, which range through various shades from pure white, rose, pink, crimson to very dark maroon. Some of them are called Oculata Varieties, having a distinct dark eye surrounded by a lighter shade. They are especially attractive in masses or ribbon beds of contrasting colors and in addition to their fine bedding qualities are excellent for window-boxes; sometimes used in vases and hanging baskets. They bloom early in the season and last in an uninterrupted succession until fall. Are excellent for cutting and graceful in decoration.

PHLOX

Seed can be sown out of doors where they are to bloom, thinning out as may be necessary or they can be started in boxes and transplanted if desired. The Perennial Varieties can be easily raised from seed and seed can either be sown in spring or in the fall. If sown in the fall they bloom the following season.

PHLOX DRUMMONDI—Grandiflora PHYSALIS (Chinese Lantern Plant) 712 FRANCHETI—An ornamental plant, forming dense bushes about 2 feet high, producing freely its bright orange-scarlet lantern-like fruits, which can be cut and dried for winter bouquets; highly interesting. Pkt.

PINKS—See Dianthus, Page 53.



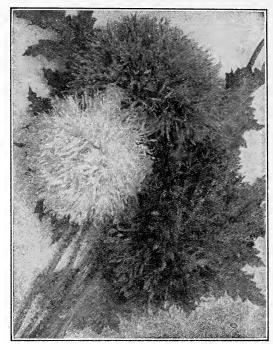
PHLOX DRUMMONDI-Grandiflora **PLATYCODON**

(Balloon Flower, or Japanese Bellflower)

PERENNIAL POPPIES

715

These should be in rows about 1½ ft. apart and 1 ft. apart in the row. Seed may be sown outdoors either in spring or fall. orientale, Scarlet—One of the most showy of all Perennial Poppies. Grows about 2 ft. high. Flowers are very large, single, a gorgeous scarlet shading to deep purplish black at the base. Flowers are borne on long stems and splendid for cutting. An excellent sort for mixed beds of Perennials or for honders. 716



DOUBLE POPPIES. VARIOUS SORTS

ICELAND POPPIES

Sunbeam-A great improvement on the ordinary mixed. The stems are longer and the flowers larger. 2 Pkts....25c.

POPPIES

Well known and popular Annuals and Perennials which produce flowers varying from moderate sized single cup-shape blooms to very much larger flowers sometimes 4 inches across both single and double. Colors are extremely vivid and brilliant; very graceful, hence, fine for cutting and for home decoration. Grown in beds and masses nothing is more brilliant in the garden and they are of easiest culture.

Seed is sown early out of doors where they are to bloom, thinning out according to size of plants from 6 to 12 inches apart. To insure a long season of blooming the flowers should be cut regularly and no pods allowed to form.

ANNUAL VARIETIES

SHIRLEY—A beautiful sort which blooms a long season and bears large single flowers of flat but artistic shape. Most petals are of very silky texture with an intense sheen. Others plain, some crimpled, some like tissue paper and others wavy. Colors range through shades of pink, rose, scarlet, carmine and are generally edged with lighter shades. If cut before blossoms are fully expanded they will open in water and remain fresh for full day. Height about 18 inches. Cholcest Mixed Colors. Pkt.

TULIP—One of the most brilliant of poppies, bearing bright scarlet tulip shaped flowers with a dark spot at the base of each petal. It makes a gorgeous display in masses. Grows about one foot high. Pkt.......

CARDINAL—A double sort having very large blooms and the petals so finely cut that the blossoms have the appearance of a large ball of brilliant searlet silk. It is one of the finest of all double sorts. Height about 2 ft. Pkt.

"MIKADO" (The Striped Japanese Poppy)—Very distinct and beautiful; the large blooms are brilliant scarlet and white, with elegantly curved and fringed petals. Pkt.....

PEONY FLOWERED MIXED—Very large, double Poppies with somewhat broader petals in many pleasing shades. Height about 2 ft. Pkt............10c

PORTULACA (Moss Flowers)

These are excellent for bedding, vases, rockeries or window-boxes, producing a dazzling display of colors. Single varieties have cup shaped flowers about 1 inch across, range through many shades of white, pink, yellow, orange, red and some are striped. The Double varieties have narrow petals which are set closely and form full heads. Stems and leaves are succulent, creeping and ornamental. They will stand a great amount of drought and bloom through a long season.

Seed should be sown outdoors after the weather is warm, covered very lightly and germinate better if sown in small rows rather than broadcast. Thin to 2 or 3 inches apart. If sown broadcast soil should be sifted over them so as not to cover too deep. A bright, sunny situation is particularly suited to Portulaca. Height about 9 inches.

726		Mixed—Comprises a wide range of colors.	
	Pkt		.10c
797	Double	Mived-Many beautiful shades Dist	100



PRIMULA

Primula

One of the best green house pot plants blooming in winter and especially admired on account of its brilliant colored, finely formed flowers and fine foliage. It can be had in perfection from November until spring. Flowers are borne in large clusters and comprise many brilliant shades varying from white through pinks, crimson to intense maroon. Individual flowers measure about 1 inch in diameter and fringed. Greenhouse perennial, growing 8 to 10 inches in height.

Seed should be sown in shallow boxes from April to the last of July, covered lightly and transplanted to small pots when ready to handle, then shifted to larger pots in which they are to bloom.

Hardy Primroses

These are among the best of the early spring-blooming plants. Half hardy perennial.

- 730 VERIS MIXED—A beautiful hardy spring-flowering perennial; flowers of different colors, such as yellow, brown-edged yellow, etc. Very fragrant; 6 inches. Pkt. 10c

Pvrethrum

Aureum is the well-known Golden Feather so much used for edging, carpet beading, etc., while the others are most attractive hardy plants.

- 732 AUREUM (Golden Feather). Yellow foliage. Pkt......10c

RICINUS (Castor Bean)

A magnificent sub-tropical plant which attains a great height and is especially desirable for centers of large beds or as backgrounds for other flowers or foliage plants.

The foliage is of various kinds some light green leaves with light stems and others darker shade and dark stems. It is grown for its foliage almost exclusively as the flowers are insignificant. Height according to soil, moisture and conditions, varies from 6 to 15 ft. H. H. A.

- 734 ZANZIBARIENSIS—Grows to immense size. Leaves sometimes measure 30 inches across and range in color from bright green to deep bronze. Choice mixed colors. Oz., 25c. Pkt.

RUDBECKIA

See Cone Flower.

Salpiglossis

A very showy, half-hardy Annual which is desirable both for bedding or border plants. Has richly colored funnel-shaped flowers of many shades including yellow, buff, crimson and scarlet and extend through to purple and almost black.

736 Tall Finest Mixed—Height 2 ft. Pkt.......................10c

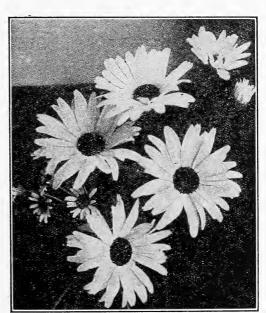
SALVIA (Scarlet Sage)

One of the most useful and effective bedding plants which produces immense masses of brilliant Turkey Red flowers from early in the season, continuing in uninterrupted succession until frost. Blooms are borne on long spikes well above the foliage and continue in good condition a long time. Spikes are often 8 to 10 inches long and have 30 to 40 tube-like flowers, borne in a feathery manner on each side of the stem.

Seed should be started in boxes, hot beds or greenhouse, transplanted and set out of doors after the weather has become warm. H. H. P. Blooming the first season.

SHASTA DAISIES (Chrysanthemum Leucanthemum)

739 ALASKA—A splendid hardy perennial variety with flowers rarely less than 5 inches across, of the purest glistening white, with broad overlapping petals, and borne on long strong stems; a beautiful cut flower, remaining in good condition a week or more. Pkt.



SHASTA DAISY

SCABIOSA (Mourning Bride)

One of the old fashioned popular Annuals which produce an abundance of many colored flowers which are excellent for cutting. The blossoms are borne on long stems, are fragrant, double, and somewhat in the shape of a pin cushion. It makes an effective garden plant for bedding or borders.

Seed can be sown in open border and thinned out from 1 to $1\frac{1}{2}$ ft. apart. H. A. growing 2 to $2\frac{1}{2}$ ft. high.

740	Double White—An excellent sort producing large flowers which are excellent for florists' use or home decoration. Pkt	. 10c
741	Double Yellow—Pkt	.10c
742	Double Purple—Pkt	.10c
743	Dwarf Double Mixed—Comprises a wonderful brilliancy in shades and colors, excellent for small beds or low borders. Height about 1½ ft. Pkt.	.10c
744	Tall Double Mixed—A splendid sort for large beds or borders. Comprise many beautiful colors. Height 2½ ft. Pkt	

SCHIZANTHUS

(Butterfly Flower or Poor Man's Orchid)

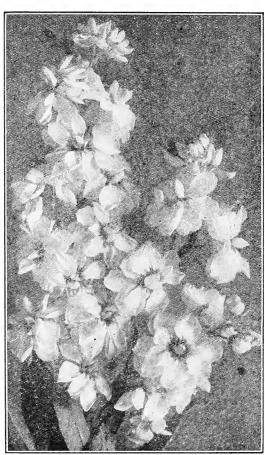
An attractive hardy Annual growing about 20 inches high, which is of neat, compact growth with finely cut foliage. The plant bears very attractive flowers ranging in colors from white to purple and are shaded from their edges to throats with darker colors. Flowers resemble somewhat the butterfly and are borne in clusters or spikes. Seed can be sown outdoors after danger of frost or started earlier indoors and transplanted.

745	Finest	Mixed	Colors-	Pkt			.10c
120	HILOST	IVIIACU	001013	T VO	 	 	

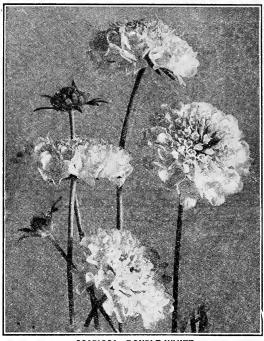
SENSITIVE PLANT (Mimosa Pudica)

It is chiefly attractive from the extreme irritability of its leave	
close or droop at the slightest touch or in a strong breeze. T. A.	Heigh
1½ ft.	





STOCKS-BEAUTY OF NICE



SCABIOSA-DOUBLE WHITE

STOCKS (Gilliflower)

Stocks last a long time in bloom, are beautiful, fragrant and

Stocks as a long which is satisfactory.

Stock seed may be sown in the open ground, or in the hotbed or cold frame, but if transplanted, let this be done when the plants are small, just out of the seed-leaf, or the plants become slender and never make good plants nor flower well. Transplant 1 foot

LARGE-FLOWERING 10-WEEK STOCKS

The favorite sort for bedding.			Grows about 1 foot high.		
	747	Purple10c	750	Canary10c	
	748	Blood Red10c	751	Light Blue10c	
	749	Pure White10c	752	Crimson10c	
		753 Good Mixed.	All	colors10e	

MAMMOTH FLOWERING

This very pleasing class of Hardy Annuals should be more largely used in the garden as they produce dense spikes of very fragrant and beautiful rose-like double flowers in a wide range of colors.

754	Princess Alice—A tall growing branched Stock producing a
	large number of white, double blooms which are most excellent
	for cutting. Pkt10c
	tor outside a more than the second of the se

- 755 Beauty of Nice-A late blooming sort which is most desirable for cut flowers and excellent for decoration. Flowers are very double, pure white. Pkt. 10c
- 756 Large Flowered Mixed A splendid mixture of double, 10 Weeks' Stock. It comprises shades of white, red, purple, lavender, maroon, etc. Pkt.....

SUNFLOWER (Helianthus)

Of easy culture, and the newer sorts are among the most ornamental and effective of all garden annuals. The single flowering sorts are indispensable for cutting. Bloom early and continue until frost.

- 757 CHRYSANTHEMUM-FLOWERED—Fine, perfectly double golden flowers, resembling Japanese chrysanthemums; 6 to 10 inches in diameter. Plants grow to the height of 5 to 6 feet. Oz., 30c. Pkt....
- 758 RED-The flowers are of a chestnut red color, which appears as a ribbon around the centre, while the points of the petals are tipped yellow. Grows to a height of 6 feet. 2 Pkts., 25c. Pkt....
 - STELLA-Height, 3 to 4 feet. Flowers star shaped, of brightest golden yellow, with dark centers. They are suitable for cutting.

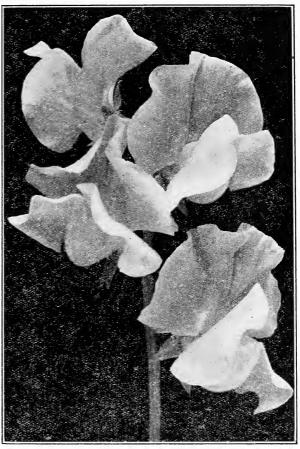
SWEET PEAS

How to Grow Fine Sweet Peas.—The general opinion is that Sweet Peas being common and hardy can be planted anywhere, which accounts for a lot of failures. There is no reason why everyone should not have fine flowers if they will observe a few simple rules. First of all, plant early, just as soon as the ground can be dug and is not sticky. Dig deeply. If you are growing sweet peas every year, try and prepare your ground in the fall, and dig 18 inches deep, mixing sheep manure thoroughly in the subsoil. The surface soil in which the seed is sown should not contain manure. If you start in the fall you will find you can sow earlier in the spring. Cover the ground an eighth of an inch with sheep manure and then dig in and mix thoroughly with the soil. Sow the seed three inches deep if on sandy soil, or two if in clay. Sow thinly unless you have the courage to pull them out after they come up. You can't have fine flowers through the season when plants are very thick. Two or three inches apart, or better, four inches if you want big flowers. Cultivate as soon as they are up and keep cultivating. Stake them as soon as the rows show plainly. For the first month they scarcely make any growth above ground, but don't need water unless the season is very dry. Later on, when they are showing vigorous growth, a thorough watering twice a week will help wonderfully, if there is not sufficient rain. Don't plant them alongside a house, under trees or close to a board fence and expect much from them. They need an open space.

The improved types of Sweet Peas are so wonderfully superior to the old-fashioned sorts, that they have become one of the most popular flowers in America. We offer below two distinct types, as follows:

The Grandiflora types are large flowered, robust growing Sweet Peas, which are very free blooming, and comprise all shades, markings and colorings to suit the most fastidious taste. As a general rule, they are best for general planting, costing less and giving good returns.

The SPENCER type or "Orchid Flowered" are very much improved, large flowered varieties most of which have wavy, fluted and frilled petals. They comprise a wonderful collection of shades and colors and of the largest and finest types of bloom. Spencers are very shy seeders, growing higher than the ordinary "Grandiflora" types. They do not



WHITE SPENCER SWEET PEAS

types of bloom. Spencers are very shy seeders, growing higher than the ordinary "Grandiflora" types. They do not require such constant picking as the Grandiflora sorts, hence even if picking is neglected will bloom longer.

INSECT REMEDIES—For the Black Fly or Aphis, spray with a solution of Tobacco or Kerosene Emulsion. For Red Spider spray with clear water.

INOCULATION — We cannot recommend too strongly that Sweet Pea seed be treated with Inoculation Bacteria before planting. We have had it prepared especially for this crop. It is easy to treat the seed and in nearly all cases will produce a most wonderful improvement in the growth and flowering of this crop. All legumes have to make a large amount of nodules on the roots to make a thrifty growth. (See Page 81)

1 ounce sows about 50 ft. In small garden rows can be 3 feet apart. For field culture, should be wider.

EARLY OR WINTER FLOWERING SPENCER VARIETIES.

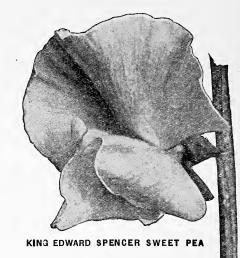
760 SNOW FLAKE—This is the best Early Flowering White Seeded Spencer. The blossoms are very large and	
of the best waved Spencer form. ½ oz., 40c; oz., 75c; pkt	10c
761 HEATHER BELL—The color is a rich, but pleasing mauve, but after standing in water the color becomes a beautiful mauve lavender. ½ oz., 40c; oz., 75c; pkt	10c
762 LIBERTY—A rich, deep, sunproof crimson. The flowers are large, well waved and borne in fours and threes. The vines are vigorous. ½ oz., 60c; oz., \$1.00; pkt.	10c
763 EARLY FLORA—Clear blue. Flowers large and waved. ½oz., 40c; oz., 75c; pkt	10c
764 YARRAWA—The color on opening is rose, changing as the flower develops, to a light pink standard, tinted buff, with blush wings. ½ oz., 40c; oz., 75c; pkt	10c
765 MORNING STAR—The color is a deep orange scarlet or flame color in standard with rich orange-pink wings. 1/2 oz., 40c; oz., 75c; pkt	10c

SUMMER FLOWERING SPENCER SWEET PEAS

766	KING WHITE-Remarkable for the glistening purity of the	
	whiteness and the perfect finish of the flower. Of truly gigantic	
	proportions. Very free flowering. Pkt., 10c. Oz., 40c. 1/4 Lb\$1.	. 20

767	DOBBIES CREAM-Deep cream or primrose colored, nicely
	waved, with an abundance of four-bloom Sprays. Pkt., 10c.
	Oz

- FLORENCE MORSE SPENCER—Deep Blush Pink. Pkt...10c Oz.......40c ½ Lb......
- HERCULES—A magnificent soft rose-pink. The broad and beautifully waved standards frequently measure two and one-half inches in diameter. Pkt., 10c. Oz., 40c. ½ Lb......\$1.20 769
- HELEN LEWIS—Orange-rose wings and intense rich crimsonorange standard. An old favorite. Pkt., 10c. Oz., 40c. ¼ Lb., \$1.20
- KING EDWARD SPENCER-The large flowers are waved and
- 773 JACK CORNWELL, V. C—A very fine dark blue of enormous size and excellent form. Vigorous, bearing four flowers on a stem. Pkt......10c Oz......40c 1/4 Lb....\$1.20



½ Lb.....\$1.20

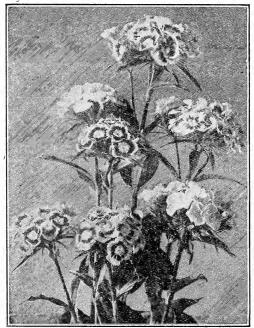
SWEET PEA MIXTURES

776 MR BEST GRANDIFLORA MIXTURE—A wonderful combination consisting of the best named varieties made up by ourselves and combined in pleasing and harmonious range of colors. Pkt., 10c; oz., 15c; ½ lb., 50c; lb., \$1.50.

777 MR BEST SPENCER MIXED—Comprises the best varieties in all beautiful shades and colors and much superior to that offered indiscriminately as coming from growers. Pkt., 10e; oz., 25e; 1/4 lb., 85c.

Sweet William (Dianthus Barbatus)

A well known old-fashioned perennial which has long been A well known old-fashioned perennial which has long been used for beds and borders. It is one of the most desirable plants in the garden, is easily grown, very hardy and free flowering, continuing in bloom for several weeks. The flowers are borne in heads or clusters, sweet scented, in brilliant colors ranging from pure white through pink, crimson, etc., to deep purple. Most of them have two colors in the same flower. They are borne on stiff stems in graceful profusion and the clusters are often 3 to 4 inches across. Useful for cutting.



SWEET WILLIAM (Single)

The seed can be sown in the spring outdoors where they are to bloom or in the fall, thinning out or transplanting at least I ft. apart each way. Or they can be sown in the house and transplanted. They form large clumps which can be divided. H. P. Height 1½ ft.

.10c

SWEET PEAS (Hardy)—See Lathyrus, Page 55. THUNBERGIA-See Page 65.

Tritoma

(Red-hot Poker, Flame Flower, or Torch Lily)

Hybrida—The introduction of new, continuous flowering Tritomas has given them a prominent place among hardy bedding plants. It is not generally known that they are readily grown from seed, many flowering the first year if sown early. The seed we offer has been saved from our own collection, which introducts did the force in this country. Of course for immeis undoubtedly the finest in this country. Of course, for immediate results it will be better to get plants, but raising them from seed is highly interesting. 2 Pkts., 25c. Pkt....

Vinca (Periwinkle)

Free flowering bedding plants which grow in bushy form and produce round, flat, disk-like flowers, about 2 inches across. They commence to bloom moderately early in the season and the plants are literally covered throughout the summer and fall. Foliage is very distinct, being dark glossy green. Leaves oblong, smooth and in contrast with the brilliant pink and white flowers extremely effective. Tender appual

"Wild Garden" Flower Seed

This comprises a mixture of annuals, biennials and perennials on sorts growing at moderate heights. No vines. and consists of sorts growing at moderate heights. trailers, or very tall growing plants being used in it.

786 Large Pkt., 10c. Oz., 25c. 1/4 Lb., 75c. 1 Lb............ \$2.50

VERBENA

This has long been a favorite bedding plant and still retains its popularity on account of its very free flowering habit and brilliant display. Flowers are borne in large clusters and comprise many shades from purest white to deep rich purple. They commence blooming early and continue in uninterrupted succession until frost. Very useful for beds and the dwarf varieties for edges. It is trailing in habit and is a desirable plant for garden vases, window boxes, rockeries, etc.

Seed can be started in the house and transplanted to the garden when the weather is warm or sown in the open ground, thinned and transplanted. Verbenas from seed are much more thrifty and less liable to rust than from cuttings. Annual 1 ft. high.

MAMMOTH VERBENA

	A magnificent strain bearing large clusters of showy flow	ers
787	White—Fine for florists' use or where white summer flowers are desired. Pkt	1 Oc
788	Defiance—Brilliant scarlet, very effective as a bedding sort. Pkt	1 Oc
789	Pink—A magnificent shade of lively pink. Heads large.	10c
790 791	Light Blue—A pleasing shade. Pkt	10c 10c
792	MAMMOTH MIXED—Comprising a wonderful range of charming colors in every conceivable shade. 1/4-02	

Violet

Modest little plants bearing white and blue flowers on long, slender stems. They are well known and extremely popular on account of their delicate and delicious fragrance. They grow well in shady, damp and moist situations and are used in rockeries.

Seed sown in the fall bloom early the next spring or if sown in the spring will bloom the following year. Hardy perennial.

00	Did -I Rt	. 1 UC
796	White-Pkt	10c
	Mixed—Pkt	

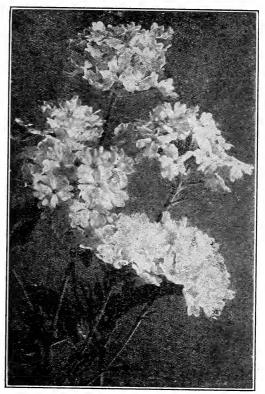
Wallflower

pike	s of bloom are of	nd deliciously fragrant most beautiful colors	Height 11 f	eet.	
98	Large-Flowering	Single Mixed-Pkt .			10c
99	Large-Flowering	Double Mixed-Pkt			10c

Woolflower-See Celosia



CURLED AND CRESTED ZINNIA



MAMMOTH VERBENA

ZINNIA

(Youth and Old Age)

Zinnias begin to bloom early in the summer and continue profusely until frost, requiring no attention and succeeding almost anywhere. Seed can be sown in open border and thinned or transplanted or if desired can be started earlier in the house and transplanted later. H. H. A.

DAHLIA FLOWERED ZINNIA

The latest development in Zinnias, bearing flowers of mammoth size and in form like a perfect decorative Dahlia. As the result of painstaking care and selection the size, form and coloring have been much improved the past season.

800	Exquisite—Color light rose with a deep rose center. 2 Pkts., 25c. Pkt
801	Old Rose—Large flower, color old rose. 2 Pkts., 25c. Pkt15c
802	Crimson Monarch-Largest and best. Red. 2 Pkts., 25c. Pkt15c
803	Giant Attraction—A distinct shade of brick red. 2 Pkts., 25c. Pkt. 15c
804	Oriole—Orange and gold. 2 Pkts., 25c. Pkt15c
805	Dream—Lavender shading to purple. 2 Pkts., 25c., Pkt15c
806	Polar Bear—Large pure white. 2 Pkts., 25c. Pkt15c
807	Canary Bird—A delicate shade of primrose. 2 Pkts., 25c. Pkt 15c
808	Finest Mixed—The mixture which we offer contains a wonderful range of beautiful colors; 3 feet. Pkt
809	DOUBLE GIANT PICOTEE—A new and distinct class producing the following colors, all tipped with various shades of dark, giving the flowers a very attractive and pleasing appearance, resembling Picotee Carnations. Orange, flesh, lemon, pink and cerise. 2 Pkts., 25c. Pkt
810	TALL DOUBLE MIXED—Comprises a wonderful range of the best colors. Very double flowers. Oz., 60c. Pkt10c
811	DWARF DOUBLE MIXED—Comprises a wonderful range of colors, very attractive. Oz., 50c. Pkt
812	DWARF CURLED AND CRESTED—Twisted and curled petals which make very effective flowers. 1/4-oz., 25c. Pkt 10c

XERANTHEMUM

(Everlasting or Immortelle)

813 DOUBLE MIXED—Bright and pretty "Everlasting" with silvery foliage and silky flowers in pink. white and purple. H. H. A. Pkt.

VINES, CLIMBERS AND TRAILERS

AMPELOPSIS

(Japanese or Boston Ivy) Hardy Ferennial

- 814 VEITCHII—The leaves are olive green turning to scarlet in the Autumn. Perfectly hardy; grows 30 to 60 feet. It clings firmly and permanently
- 815 BALLOON VINE (Cardiospermum)--A very attractive trailer, being remarkable for its inflated seed pods which are very light green color and this, with the foliage, makes it extremely ornamental, unique and attractive. It is of rapid growth and graceful; has small insignificant white flowers and attains a height of 6 to 8 ft. Sometimes called "Love in a Puff." T. A.

BALSAM—PEAR AND APPLE (Momordica)

Tender annual climbers bearing ornamental fruits of various colors. They grow 10 to 12 ft. high. Have light green foliage, rather large leaves and are very graceful.

Seed should be planted out of doors when the weather is warm.

- 816 BALSAM APPLE—Like Balsam Pear with foliage smaller and smaller fruits, very nearly round. Green, striped when young, afterwards becoming scarlet. Pkt.......10c
- 817 BALSAM PEAR—Fruits oblong, pointed and warted, first green, afterwards changing to bright red. When fully ripe, burst open exposing the seed. Largely used for putting in alcohol or whiskey and used as a poultice or for cuts, bruises and wounds. Pkt...

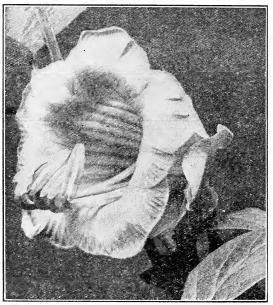
CANARY BIRD FLOWER

818 CANARY BIRD FLOWER—A beautiful climber with small beautiful, rich yellow flowers and dark foliage, the leaves resembling palm leaves. It is a quick grower attaining a height of 12 ft. Blooms profusely from July until frost. Pkt....

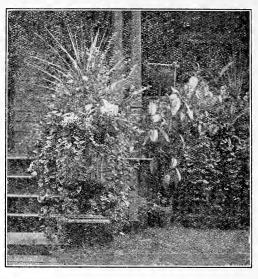
Cardinal Climber

(Ipomoea Quamoclit Hybrida)

819 The most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer; cardinal-red clusters, 15 to 25 feet. T. A.



COBAEA SCANDENS



CLEMATIS

Well known and popular Perennials which are valuable for trellises, low porches and arbors. They are of various sizes and colors of bloom varying from very small white star-like flowers borne in immense clusters to the large white purple and red sorts. Seed should be sown early and transplanted or can be sown in the fall. H. P.

Cobaea Scandens

An attractive, rapid growing Climber with large bell-shaped flowers which at first are green but gradually change to a deep violet blue. The foliage is handsome, dark green; a great profusion of tendrils is produced and it is valuable for arches, trelliese, arbors and attains a height of as much as 30 ft. in a season. T. P. Seed should be started indoors in shallow boxes using light loamy soil and placing the seed edgewise. Set the young plants in the open when the ground is warm.

823 Blue--Pkt.....

Cypress Vine

A beautiful rapid growing Climber with delicately out vivid green foliage and star-like flowers which make a most effective contrast with the leaves. Seed is usually sown outdoors where the plants are to remain, covering 1½ inches deep. T. A. About 15 ft. high.

824 Scarlet-A very neat, rich shade. Pkt..................10c

- 826 MIXED-Mixed scarlet and white. Pkt......10c

Gourds

Well known ornamental Climbers making a rapid growth. The vines are vigorous, have moderately large, round leaves and fruits of many sizes, colors and shapes. Seed should be planted outdoors when the weather is warm and do best in rich soil and sunny situations. T. A. Height 15 to 20 ft.

- 827 BOTTLE-Curious bottle shaped fruits, useful for house hold purposes. Pkt.....
- 828 CALABASH or DIPPER-The pipe gourd which is so popular. Pkt. . 10c
- 830 DISH CLOTH—Long, green, corrugated fruits, the inside of which is a fibrous mass which when the seeds are removed makes an excellent household sponge.

 Pkt.
- CLUB-The longest of all sorts, some-831 HERCULES'
- 832 JAPANESE NEST EGG—Small white fruits which do not crack with heat or cold. Pkt......10c 834 SUGAR TROUGH—Pkt......10c
- 835 MIXED—Mixture of small sorts including some of the above and many others curiously shaped and ornamental sorts. Pkt......10c

Japanese Hop (Humulus)

Hardy Annual Climber.

836 VARIEGATED—A charming climber, attaining a growth of 20 to 25 feet in a few weeks. The leaves are beautifully marked and variegated with white, yellowish green and dark green. Pkt...10c

Hyacinth Bean (Dolichos Lablab)

A beautiful tender annual climber bearing large clusters of purple and white flowers which are afterwards followed by ornamental purple seed pods. Height 15 to 20 ft.

837 MIXED COLORS—Pkt 10c

Ice Plant—(Mesembryanthemum)

838 Valuable for hanging baskets, rockwork, vases and window boxes. It is curious growing, the leaves and stems appearing as though covered with ice crystals. A tender

Kenilworth Ivy

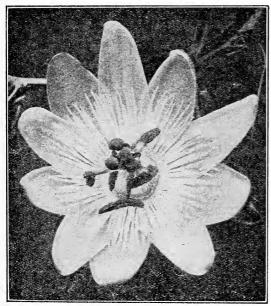
839 Valuable for hanging baskets, vases, pots and window boxes. It produces a mass of small, smooth bright green Pkt...... 10c leaves which are extremely attractive.

Moon Flowers (Evening Glory)

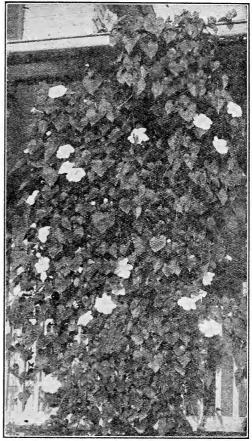
The well known and popular tender perennial so largely used. It grows to an immense height, sometimes 30 to 40 ft. in a single season and is literally covered with large white flowers 3½ to 4 inches across which open in the evening and are very sweet scented. Useful for covering old fences, dead trees, stables, and unsightly places, being extremely rapid growing with a profusion of large leaves. of large leaves.

Seed should be started indoors and transplanted to the open after the weather is warm. As the outer seed shell is particularly hard, a small hole should be filed in it or part shaved off with a knife before planting. Soaking in very warm water 24 hours is beneficial.

840 NOCTIFLORA—Pkt......10c



PASSION FLOWER



MOONFLOWER

Morning Glories

NASTURTIUM—Tall—See Page 56.

Passion Flower

Smilax

846 SCARLET RUNNER. Pkt....

Thunbergia (Black Eyed Susan)

An attractive climber growing 4 to 6 ft. long which is largely used for garden vases, window-boxes, hanging baskets. etc. Flowers are about 1 inch across being of creamy white, buff and orange colors with very dark brown throats; very free blooming. A very attractive plant both in foliage and in abundance of flowers.

848 MIXED—Colors, creamy white, buff and orange. Pkt.. 10c

Wild Cucumber (Echinocystis Lobata) 849 WILD CUCUMBER (Echinocystis Lobata)—A useful and rapid climber of vigorous growth which bears an abundance of foliage and is thickly covered with sprays of small, white fragrant flowers followed by numerous prickly seed pods; valuable for covering old buildings, trellises, porches or anywhere that quick growth is desired. Can be sown very early in the spring or late in fall. H. A. Pkt....

ROSES FOR THE GARDEN

HOW TO GROW ROSES

SITUATION—Good Roses may be grown in any open, sunny position, if possible sheltered from north winds, and clear of all roots of trees and shrubs.

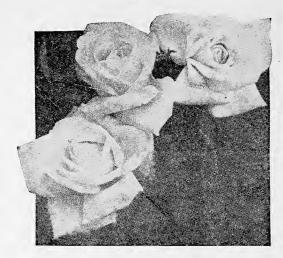
PREPARATION OF THE BEDS—Roses will grow and give good returns in any fertile, well-drained ground; but it is worth while to use some care in the preparation of the beds, as the general health of the plants, quantity and quality of bloom usually more than repay the extra care expended on this detail. The best soil for Roses is the top soil from an old pasture and well-rotted cow manure. Dig out the bed to a depth of two feet or more, and, if drainage is imperfect, it must be provided for. Fill in with a mixture of soil and manure as above. It is best to make the beds some time in advance of planting to allow time for settling. After the soil is settled it should be about an inch below the level of the adjacent surface; make the beds not over 3½ to 5 feet wide, which enables you to pick the blooms without stepping on the bed.

PLANTING AND SUMMER CARE—The ideal time to plant Roses as prepared by us is in the spring, just after

danger from severe frost is passed.

Tea and Hybrid-Tea varieties can be set 18 inches apart, Hybrid Perpetuals two feet apart, and both eight inches from the edge of the beds. When the plants are supplied in pots, they should be set so that the ball of earth is about two and one-half inches below the level of the ground. Firm the soil well around the plants, and give a thorough watering if the soil is dry. Throughout the summer the surface of the soil should be cultivated weekly. If this is done, watering will be rarely necessary.

WINTER PROTECTION—In this latitude we have found that the most satisfactory protection is to draw up a mound of soil from 8 to 10 inches high around the base of



the plant, then covering the entire beds after the ground begins to freeze with any loose material, such as strawy manure, evergreen boughs or corn stalks, and in more severe climates heavier covering is all that is required.

climbing or training over summer houses pergolas, along fences and the rose walk. Climbing roses should be planted from three to eight feet apart, depending upon how dense a covering is desired. Little, if any, pruning should be done. Branches that grow in long shoots, many times 15 to 20 feet or more, should be carefully trained and tied to trellis or support.

Ever Blooming Hybrid-Tea Roses

Two-year-old field grown plants ready April 1st to May 10th. 75c each; \$7.50 per doz.

We can supply all popular varieties not listed below:

GRUSS AN TEPLITZ—The finest brilliant red, everblooming garden rose. A free grower and sweetly fragrant.

HADLEY—One of the newer red roses; deep rich, velvety crimson, well formed buds, large, double flowers on long stiff stems. Very fragrant.

HOOSIER BEAUTY—Deep, glowing crimson with darker shadings; large, beautifully formed flowers carried on vigorous, branching stems.

JONKHEER J. L. MOCK—Color deep pink, outer petals silvery rose; very fragrant. Blooms of large size, produced on stiff, erect canes.

KAISERIN AUGUSTA VICTORIA—A superb white rose, does not pink when planted out; splendid large buds and superb blooms. A sturdy grower and steady bloomer.

HARDY HYBRID PERPETUAL OR JUNE ROSE

AMERICAN BEAUTY-Deep rosy carmine.

GENERAL JACQUEMINOT—Deep velvety crimson.

PAUL NEYRON—Deep rose, large flowers.

FRAU KARL DRUSCHKI-The best snow white.

MARSHAL P. WILDER—Deep red, very fragrant.

MAGNA CHARTA—Deep pink, sweet scented.

KILLARNEY BRILLIANT—Color rosy carmine, very free bloomer.

MME. CAROLINE TESTOUT—Very large flowers of great beauty. The broad petals are a bright satiny-rose.

MRS. AARON WARD—A striking color; copperyorange in the open bud; golden orange when fully developed. Color effect of the whole flower is Indian Yellow. Flowers large and full, of refined form.

OPHELIA—Salmon flesh, shaded with rose and with a heart of glowing peach-pink and orange-yellow blendings; large, fragrant and of perfect shape.

SUNBURST—The color is orange-copper or goldenorange and golden-yellow; edge of petals lighter, all intense shades, extremely brilliant in effect. Long stems and long, pointed buds; a vigorous grower.

WHITE KILLARNEY—A pure white sport from the pink parent; long in bud and of fine form.

HARDY CLIMBING ROSES

AMERICAN PILLAR—Rich rosy pink.

DOROTHY PERKINS—Pure salmon pink.

SILVER MOON—Pure white.

EXCELSA — Red Dorothy Perkins. Very free

 ${\bf BESS\ LOVETT-Clear\ bright\ red.}$ An improvement on Climbing American Beauty.

AVIATEUR BLERIOT—Double flowers of a bright saffron yellow.

DR. VAN FLEET—Rich flesh-pink; exquisitely shaped buds.

STIMUPLANT Makes a WONDER GARDEN

Climbing and Trailing Plants

STIMUPLANT Makes a WONDER GARDEN

AMPELOPSIS

VEITCHII—Japan Creeper. Boston Ivy. A rapid growing climber which clings to walls, fences, trees, stumps, etc., with great tenacity. The leaves wer lap one another, forming a dense sheet of green in summer, which changes to crimson scarlet in autumn. Strong 2-year old, each 50c. Doz. \$5.00.

Each, 50c. TILN PET VINE.—A hardy c'imber, of loose trailing habit and bearing long trumpet-shaped attractive flowers of pinkish salmon color. Each, 50c.

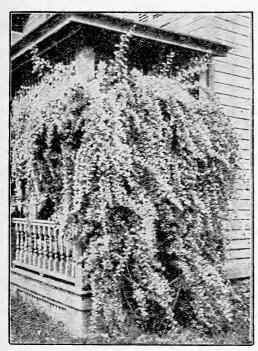
CELASTRUS

SCANDENS (Climbing Bitter Sweet)—A native climbing or twining plant, with fine, large leaves, yellow flowers and clusters of orange-capsuled fruit in the mm. It grows 10 to 12 feet in a season. Each, 50c.

CLEMATIS

Among the most popular of hardy perennials and not exceeded in beauty and effectiveness by any other class of climbers. They are excellent as a screen for fences, pillars, or trailing on walls or arbors, or on verandas. Very effective in masses of rock work and some are valuable for cultivation in pots. Clematis does best in deep, rich sandy, loamy soil, well mulched with manure, and the finest results are obtained in partial shade, where there is a liberal supply of water given at the protest.

NAMED SORTS-These include Jacmanni (large violet purple), Henryii (large creamy white), Madam Edw. Andre (large bright velvety red). Strong plants each \$1.00.



CLEMATIS PANICULATA

PANICULATA—A rapid luxuriant growing sort, bearing immense clusters of small double white flowers in greatest profusion in late summer. It is sweet seented and most desirable for verandas, fences, trellies, and grows from 20 to 30 ft. in a single season. Should be cut back to the ground each year. Each 50c.

HONEYSUCKLE

Monthly Fragrant—Blooms all summer. Red and yellow very fragrant flowers. Each 50c. Doz. \$5.00.

DOX. 50.00.

Japan Golden Leaved—A handsome and very desirable sort with beautifully netted and variegated foliage. Each 50c, 10 for \$4.00.

Scarlet Trumpet—A strong rapid grower which produces scarlet flowers not sweet scented. Each 50c. Doz. \$5.00.

HALL'S JAPAN (Halleana)—A strong, vigorous, almost evergreen sort. Pure white flowers changing to yellow, very fragrant. Blooms abundantly from July to December, holds its leaves until January. Each 35c. Doz. \$3.50.

IVY

ENGLISH-A well known sort which is used for covering walls or planting in cemeteries, especially in the shade. Each 60c. Doz. \$6.00.

KUDZU VINE-Pueraria Thunbergiana or Jack and the Bean Stalk Vine

The most remarkable climber extant. In rich soil will grow 70 feet in one season. It starts into growth slowly, but after 3 or 4 weeks grows almost so rapidly as to be beyond belief. Leaves are of the shape of lima beans, dark green, soft and woolly, fine for porches, arbors, old trees, etc., Strong plants, each 35c.

MATRIMONY VINE—Lycium

A well known hardy fast growing vine. It is very handsome when covered with scarlet foliage in the autumn. Used as a trailer especially under trees or on terraces, or any kind of a steep slope, as its roots hold the soil in place. Strong plants, each 30c. Doz. \$3.00.

WISTERIA

CHINESE PURPLE (Sinensis)— An elegant and rapid growing climber, attaining a height of 20 feet in a season. Has hundreds of long, pendulous clusters of sweet scented pale blue flowers in May and June and in autumn. Strong, each, 60c

CHINESE WHITE-Similar to above. Pure white flowers; beautiful. Each 60c.

ORNAMENTAL GRASSES

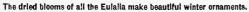
PRICE ALL VARIETIES, 35c.

ERIANTHUS RAVENNAE (Plume Grass)—Grows six to eight feet high and produces handsome plumes in fall.

EULALIA GRACILLIMA—(Japan Rush)—The most beautiful of all the Eulalias, with narrow, graceful foliage entirely green, except that the mid-rib is of a silver sheen. Perfectly hardy.

EULALIA JAPONICA VARIEGATA-Leaves striped white and green longitudinally.

EULALIA ZEBRINA (Zebra Grass)—A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light yellow alternating.

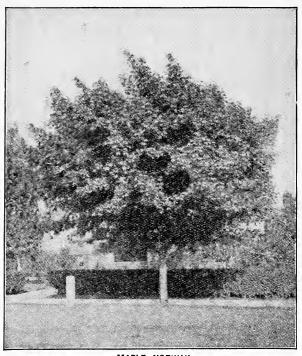




WISTERIA

Deciduous Shade and Ornamental Trees

FOR LAWN, STREET AND FOREST PLANTING



MA	PLE.	NO	RWA	٧

•		D D	
ALIANTHUS (Tree of Heaven)	Each \$1.75		PERSIMMON, American 4 to 6 * 1.50
			POPLAR, Carolina
ASH, American White	2.00	20.00	* Lombardy 8 to 10 * 1.25 12.50
European 6 to 8	2.25		
Mountain European	2.00		SYCAMORE, American
			STRAWBERRY TREE (Euonymous,
BEECH, American	1.50	15.00	European)
			THORN (Crataegus) Paul's Scarlet 4 to 5 " 1.50
BIRCH, Cut Leaf Weeping 6 to 8 *	5.00		" Double White and Pink 4 to 5 " 1.50
" American White 6 to 8 "	3.00	• • • • •	•
			TULIP TREE 6 to 8 * 2 00 20.00
BIRD CHERRY (Prunus Padus) 8 to 8 *	1.50	••••	8 to 10 * 2.25
			WILLOW, Laurel-Leaved
BOX ELDER (See Maple Ash-Leaved).			* Babylonica
BUCKEYE, Ohio 4 to 6 "	1.50	15.00	
			NUT BEARING TREES
CATALPA, Speciosa 8 to 10 *	2.00	20.00	NOT BEARING TREES
Bungei, grafted 1 yr	2.25	• • • • •	Each
" 2 yr	3.25	••••	BUTTERNUT
CHERRY, Japan Flowering 4 to 6 ft.	2.00	20.00	CHESTNUT, American Sweet 5 to 6 * 1.25
CRAB APPLE, Bechtel's double Fl'g 4 to 5 "	1.25	12.50	FILBERT, English
			HICKORY, Shellbark
CYPRESS, Deciduous 6 to 8 "	1.50	15.00	
			PECAN
EMPRESS TREE (Paulownia Imperialis) 6 to 8 *	1.50	15.00	WALNUT, English 2 to 3 4 1.50
ELM, American 6 to 8 *	1.00	10.00	" Black 6 to 8 " 2.00

LINDEN, American 6 to 8 *	2.00	20.00
European Broadleaf 6 to	2 25	
•		
LIQUIDAMBER—Sweet Gum	2.25	
EIQUIDAMBEIT BREET GUM	2.20	••••
MAIDEN HAIR TREE (Salisburia)—Rapid		
growth, beautiful fern-like foliage re-	0.70	
sembling maiden hair fern 6 to 8 ft.	2.50	••••
MAPLE, Ash-leaved (Box Elder) 8 to 10 "	2.00	
* Norway 8 to 10 *	4.50	
" Silver 8 to 10 "	2.00	
" Sugar or Rock 8 to 10 "	3.00	30.00
		,
MULBERRY, Weeping, Russian, 2 yr	3.50	
Moesemin, weeping, Russian, 2 ji	3.30	••••
OAK, Pin 6 to 8 *	3.75	
" Red	3 00	• • • • •
"' Scarlet 6 to 8 "	3 50	• • • • •
PAULOWNIA—See Empress Tree.		
PEACH, Flowering Red and White 4 to 5 ft.	1.50	15.00
PERSIMMON, American 4 to 6 *	1.50	• • • •
non. on 0 11		
POPLAR, Carolina 8 to 10 "	1.50	15 00
* Lombardy 8 to 10 "	1.25	12.50
SYCAMORE, American 8 to 10 "	2.00	20.00
STOAMONE, American 6 to 10	2.00	20.00
CTDAWDEDDY TOTE (Francisco		
STRAWBERRY TREE (Euonymous, European)	1.75	
European) 3 to 4	1.75	••••
THORN (Crataegus) Paul's Scarlet 4 to 5 "	1.50	
Double White and Pink 4 to 5	1.50	
Double white this rime	1.00	•••••
TULIP TREE 6 to 8 *	2 00	20.00
« 8 to 10 "	2.25	
WILLOW, Laurel-Leaved 8 to 10 *	1.75	
" Babylonica 6 to 8 "	2 00	
Weeping	2 00	

HORSE CHESTNUT, White Fl'g...... 6 to 8 *

LARCH...... 4 to 6 * 1.25

Red Fl'g..... 6 to 8 "

Each Per Doz.

\$12.50

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES.

ORNAMENTAL FLOWERING SHRUBS.

We do not guarantee to replace Plants, Shrubs or Trees.



There is nothing that will add more beauty or lend more enchantment to grounds and lawns than well selected judiciously grouped shrubs, and considering their moderate cost, they should be used more largely. Our book on "What, Where, When and How to Plant" gives details as to grouping and will be mailed free on request.

			Each	Doz.
ALTHEA (Rose of Sharon). The Altheas are among the our hardy Shrubs on account of their late season of is from August to October a period during which I trees are in flower. They are also extensively used for which they are admirably adapted.	blooming out few sl as hedge	g, which hrubs or e plants,	DOGWOOD—(White Flowering).—The flowers produced in spring before the leaves appear, are from 3 to 3½ inches in diameter, white and very showy. Foliage grayish green, glossy and handsome, and in the autumn turns to a deep red; one of the most showy	
ALTHEA BOULE-DE-FEU, deep fiery red	Each \$0.60	Doz. \$6.00	flowering trees\$1.00	\$10.00
ALTHEA JEANNE D'ARC, double white	.60	6.00	DOGWOOD (Red Flowering).—A rare variety, similar to the	
ALTHEA MEEHANI, beautifully variegated foliage with satiny lavender colored flowers, single fully open and free blooming		7.50	common type except in color of the flowers, which are rich rosy-red. The two varieties make a fine contrast. 3.0	0 30.00
ALTHEA PURPUREA, large single purple	.60	6.00	EUONYMUS EUROPAEUS (Burning Bush).—A con-	
ALTHEA TOTUS ALBUS, single pure white	.70	7.00	spicuous shrub, in the autumn and winter when loaded	
ALTHEA VARIEGATED LEAVES, leaves conspicuously margined creamy white, flowers double purple	.75	7.50	with scarlet seed pods, from which the orange- colored berries hang on slender threads, 3 feet. Extra strong plants	0
ALTHEA DOUBLE ROSE, DOUBLE WHITE AND DOUBLE PURPLE	.60	6.00	FORSYTHIA FORTUNEI (Golden Bell).—Of upright	
BARBERRY THUNBERGI—A beautiful Japanese variety of dwarf habit. Small foliage, assuming the most varied and beautiful tints of coloring in the autumn; very desirable for grouping and a grand hedge plant Strong plants. 2 to 2½ feet.	.75	7.50	growth, deep green foliage and bright yellow flowers in April	0 5.00
15 to 18 inch		4.50	flowers bright yellow, a fine hardy shrub and one of the	
BUDDLEYA. (Butterfly Shrub or Summer Lilac.) Flowers continuously all season. The flowers are composed of many little blossoms in the shape and color of			earliest to flower in spring	0 5.00
lilacs	. 60	6.00	FRINGE	
CALYCANTHUS FLORIDUS (Sweet-Scented Shrub).— Flowers fragrant, like strawberries; double and of a chocolate color.	.75	7.50	PURPLE OR SMOKE TREE (Rhus Cotinus) (A)—An attractive shrub having very curious blooms, which, when covered with dew, resembles a cloud of smoke	
DEUTZIA GRACILIS, a dwarf bush, covered with spikes of pure white flowers in early summer	.75	7.50	or mist	5 7.50
DEUTZIA LEMOINI — Flowers pure white. Habit dwarf and free flowering. Extra strong plants	.60	6.00	WHITE FLOWERING (Chionanthus) (A)—A small native tree or shrub of roundish form, with large, glossy leaves	
DOGWOOD (Red Twigged).—A strong growing bush, with crimson-colored branches, especially attractive in winter.	1.00		and drooping racemes of pure white flowers, having narrow, fringe-like petals. A superb lawn tree. Blooms in May or June	10.00

ORNAMENTAL FLOWERING SHRUBS-Cont'd.

HYDRANGEA PANICULATA GRANDIFLORA. This is the finest shrub in cultivation, and endures heat and cold extremely well. The flowers, which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks.	Each	Dog.	
Extra strong plants. 2 to 3 feet	\$.90	\$ 9.00	
HYDRANGEA PANICULATA GRANDIFLORA Standard or Tree Shaped.			
These are fine specimen plants, four and five years old, trained to tree shape with about three feet of straight stem and nicely shaped heads, should bloom profusely the first year. Extra strong plants.			
HONEYSUCKLE, Upright.			
Valuable for handsome flowers and showy fruits. The following varieties are erect, upright growth. The climbing sorts will be found under the head of Climbing Plants.			
MORROWI—A fine variety from Japan, valuable for its handsome fruit. 2 to 3 ft	. 75	7.50	
		1.00	
RED TARTARIAN—Pink flowers which contrast beautifully with the foliage. 2 to 3 ft	.75	图 7.50	
WHITE TARTARIAN—Forms a high bush of creamy white fragrant flowers in May and June. 2 to 3 ft	.75	[7.50	
LILAC COMMON (Syringa Vulgaris)—The common purple species, and one of the best, 3 feet	75	7 50	
LILAC COMMON WHITE (S. Vulgaris alba).—Flowers pure white; very fragrant, 2 feet	.75	7.50	SPIREA—Continued
MOCK ORANGE OR SYRINGA.—A well known shrub,		1.00	Each Dos. THUNBERGI — Of dwarf habit, rounded, graceful form
with pure white, highly scented flowers. One of the first to flower. Extra strong plants	.75	7.50	with slender branches, somewhat drooping. Flowers are small, white, appearing early in spring. Foliage
PRUNUS, Plum.			narrow and yellowish green. One of the first Spireas
PURPLE LEAVED (Pissardi)—The finest purple-leaved small			to bloom, and much esteemed on account of its neat, graceful habit
tree or shrub. The leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in fall. No other purple leaved tree or shrub retains its color like this. The flowers are small, white, single, covering the tree.	.75		2 to 3 ft
CYDONIA JAPONICA (Japan Quince).—Blooms in early spring; flowers dazzling scarlet. Makes an excellent			presenting a beautiful appearance. It is a beautiful ornament for the lawn at any season. Perfectly hardy, an early bloomer and one of the finest
hedge, 3 feet	. 50	5.00	shrubs in the catalogue. 3 to 4 ft
SNOWBALL, Viburnum.			
COMMON (Sterilis), — A well known and favorite shrub, of large size, which bears large globe shaped clusters of pure white sterile flowers the latter part of May.			WEIGELIA EVA RATHKE—A charming variety, flowers brilliant crimson, a beautiful, distinct clear shade, strong plants
2 to 3 ft	1.00	10.00	
SNOWBERRY.			WEIGELIA ROSEA NANA VARIEGATA—Leaves beautiful margined creamy white; flowers pink. It is a dwarf
A graceful shrub, three to five feet tall, with slender branches. Flowers white or pinkish, in summer. Berries white, produced in showy clusters, the branches bending			grower, and adapted to small lawns or gardens, 3 feet. Strong plants
under their weight	. 65	6.50	HEDGE PLANTS
SPIREA. Meadow Sweet.			CALIFORNIA DRIVET_They are your valuable for absubbasics
Elegant low shrubs of easiest culture, their blooming extends over a period of 3 months.			CALIFORNIA PRIVET—They are very valuable for shrubberies, with their clean, dark green foliage, which is rarely attacked by insects and keep its green color mostly unchangeduntil late fall, excepting L. Ibota, which turns a purplish hue. The privets are all well adapted for planting as or
ANTHONY WATERER — A fine dwarf Spirea bearing dark crimson flowers all summer. One of the finest shrubs.	0.5	a =0	namental hedges and do well in the dust and smoke of the city. Hardy growing well in almost any kind of soil.
BILLARDI —A fine rose-colored sort, which bloom nearly	.65	6.50	12 to 18 inches\$0.75 dozen; \$4.50 per 100.
all summer. 3 to 4 ft	.60	6.00	$1\frac{1}{2}$ to 2 feet 1.00 dozen; 6.00 per 100. 2 to $2\frac{1}{2}$ feet 1.20 dozen; 7.50 per 100.
WE DO NOT OUR			

EVERGREENS. Coniferae.

Cone bearing evergreens are especially ornamental for large grounds, and the dwarf varieties desirable for massing even in small plots. They are particularly attractive for winter landscapes when deciduous trees are divested of their foliage. If carefully handled, evergreens transplant as successfully as any other tree, and those we offer are all balled and wrapped with burlap. April is regarded by nurserymen generally as the best month for transplanting evergreens, though quite large numbers are put out in the fall.

ARBOR VITAE. Thuja.

Well known evergreens having mostly flat branches and of various shades. Some sorts are particularly desirable for hedges.

American—A beautiful native sort, commonly known as White Cedar. Grows very symmetrically and is excellent as a single plant or for massing, and largely used as hedge plants or for screens. 2 to 3 ft., each, \$2.00, \$20.00 per dozen. 3 to 4 ft., each, \$3.00, \$30.00 per dozen.

Compacta—A dwarf compact sort. 15 to 18 inches each, \$2.00.

Pyramidal—Of upright compact habit like the Irish Juniper, very desirable for tubs. 2 to 3 ft., each, \$3.25, \$32.50 per dozen. 3 to 4 ft., each, \$4.00, \$42.50 per dozen.

Siberian—The best of all sorts for this country. It is exceedingly hardy, keeping its color well in winter. Of compact growth, pyramidal, makes an elegant lawn tree of great value for ornament or for screening, hedges and tubs. 15 to 18 inches each, \$2.00.

CYPRESS. Retinospora.

Rare and choice evergreens of graceful habit and beautiful foliage.

Obtusa—Beautiful fern-like branches, more or less weeping. Foliage bright green. 15 to 18 inches. Each \$5.00.

Plumosa—A beautiful evergreen with finely cut foliage, which is very bright fresh green. 2 to 3 ft., each, \$5.00.

FIR. Abies.

Balsam—Very erect, regular pyramid-shaped tree with dark green sombre foliage. It grows rapidly and is very hardy. 2 to 3 ft., each, \$3.50.

Silver (Colorado), (Concolor).—Without doubt one of the finest evergreens. Graceful habit, broad, handsome foliage, bluish above, silvery beneath. A grand tree. 2 to 3 ft., each, \$5.00.

HEMLOCK. Tsuga.

A beautiful and remarkably graceful native tree, with drooping branches, and delicate dark foliage, like that of the Yew. It is a handsome lawn tree, distinct from all other and makes a highly ornamental hedge, 2 to 3 ft., each, \$4.50. 3 to 4 ft., each, \$7.00.



SPRUCE. Picea.

Erect growing trees, leaves needle shaped, scattered around the shoots.

Colorado Blue (Pungens Glauca)—One of the hardiest and most beautiful of all Spruces; similar in form and habit to the white Spruce, but the foliage is of rich blue or sage color. 2 to 3 ft., each, \$10.00.

Koster's Blue—Similar to the preceding, except the foliage is much brighter blue; very rare. 2 to 3 ft., each, \$15.00.

Norway (Excelsa)—An elegant tree which is extremely hardy, of rapid growth, lofty, pyramidal form. Branches assume a graceful, drooping habit when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees, or in masses, for effect or shelter. A splendid evergreen hedge plant. 1½ to 2 ft., each, \$1.25. 2 to 3 ft., each \$2.00.

JUNIPER. Juniperus.

Irish—A distinct and beautiful variety, of erect dense, conical outline, resembling a pillar of green; very desirable singly, as a hedge, or for massing. 2 to 3 ft., each \$3.00.

Virginiana (Red Cedar)—A well-known American tree, varies much in habit and color of foliage, some being quite stiff, regular and conical; others loose and irregular. It makes a fine ornamental hedge plant. 2½ to 3 ft., each, \$2.50.

PINE. Pinus.

Austrian—A remarkably robust, hardy variety with long leaves, stiff and dark green. It is one of the most valuable sorts, growing rapidly, and of spreading habit. 2 to 3 ft., each, \$2.25.

Mugho—A small pine of upright growth. Its general form is that of a pine bush. 12 to 18 in., each, \$2.75.

Stobus (White Pine)—A very beautiful and graceful pine, regular in form with horizontal boughs and dark green foliage, growing quite tall, surmounted by symmetrically formed crown. 2 to 3 ft., each, \$2.00.

FRUIT TREES

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to thrive; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the trees therein, carefully pack the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air. We do not guarantee to replace plants or trees.

SENT BY EXPRESS OR FREIGHT AT EXPENSE OF PURCHASER

Apples

STANDARD

We can furnish all varieties usually catalogued, but the following list comprises the most desirable sorts:

5 to 7 feet, 90c. each; \$9.00 per dozen.

SUMMER VARIETIES

EARLY HARVEST-Pale yellow, fine flavor, August. GOLDEN SWEET-Pale yellow, sweet and good; August.

RED ASTRACHAN—Large, crimson, juicy, with rich sub-acid flavor; hardy.

YELLOW TRANSPARENT-Pale yellow, good quality.

AUTUMN VARIETIES

OLDENBURG (DUCHESS OF OLDENBURG)-Large, striped over a greenish yellow ground.

FALL PIPPIN-Very large, yellow, rich, aromatic. MAIDEN'S BLUSH-Large, beautiful, blush cheek.

RAMBO-Yellow, streaked with red; October to December.

WINTER VARIETIES

BALDWIN-Large, dark red, productive

BEN DAVIS-Large, handsome, striped; good quality.

GANO-Deep red, fine quality; good shipper and keeper.

GOLDEN RUSSET-Medium, dull russet. crisp, juicy.

GRIMES GOLDEN PIPPIN-Medium to large, skin golden yellow, flesh crisp, tender, juicy, long keeper.

JONATHAN-Medium, red and yellow, flesh tender, juicy and rich-

ROME BEAUTY-Large, yellow shaded red, tender.

SMITH'S CIDER-Medium, tender and juicy; sub-acid.

WHITE PIPPIN-Large, pale yellow, rich, sub-acid.

WINE SAP-Medium, deep red, rich, sub-acid.

Crab Apples

5 to 7 feet

\$1.00 each; \$10.00 per dozen

HEWES CRAB FOR CIDER—Best cider crab grown.

YELLOW SIBERIAN-Golden amber, with red blush in sun.

HYSLOP-Deep crimson, very popular on account of its large size, beauty and

hardiness

TRANSCENDANT-Skin yellow, striped with red.

Pears

STANDARD AND DWARF

5 to 7 feet, \$1.50 each; \$15.00 per dozen

BARTLETT-Large, clear, yellow, juicy. August. FLEMISH BEAUTY-Large, juicy, rich and fine; September to October.

KIEFFER'S HYBRID-Large, rich color and good quality. SECKEL-Small, yellowish brown, one of the best.

SHELDON-Large, round, russet-red. October.

Quinces

4 to 5 feet, \$1.50 each; \$15.00 per dozen

CHAMPION - Fruit bright yellow; flesh very fragrant and tender; October.

ORANGE-Large bright golden yellow, fine quality; flesh firm, cooks tender. October.

Peaches

4 to 5 feet, 60c. each; \$6.00 per dozen

CHAMPION-Creamy white with red cheeks, free-stone, excellent quality, early in August.

CRAWFORD'S EARLY- Large yellow, of good quality, freestone; early in September.

CRAWFORD'S LATE-Large, yellow with red cheek, freestone; last of September.

ELBERTA-Large, yellow with red cheek, flesh yellow; firm, juicy, of high quality, very prolific; September.

FITZGERALD—Large, yellow suffused with red, flesh deep yellow, best quality, hardy and productive; early September.

HEATH CLING-Large, flesh white, juicy and melting; October.

OLD MIXON FREE-Large, yellow with red cheek; September.

SMOCK'S FREE—Large, yellow, very productive; late September.

Cherries

HEART AND BIGARREAU (Sweet)

4 to 6 feet, \$1.50 each; \$15 00 per dozen

BLACK TARTARIAN-Very large, purplish black, juicy, rich, excellent productive; last of June.

GOVERNOR WOOD—Large, light red, juicy, rich, delicious. Tree healthy and productive; June.

YELLOW SPANISH-Large, pale yellow with light red cheek; late June.

DUKE AND MORELLO (SOUR)

4 to 6 feet, \$1.75 each; \$17.50 per dozen

DYEHOUSE--A very early and sure bearer; ripens a week before Early Richmond; fine quality; June.

EARLY RICHMOND-Medium, dark red, fine quality.

ENGLISH MORELLO-Dark red, rich, acid, juicy, and good.

MONTMORENCY-Large, red, fine flavor; finest acid cherry.

Plums

5 to 7 feet, \$1.75 each; \$17.50 per dozen

ABUNDANCE-Large, yellow with heavy bloom, good quality, very prolific. BURBANK-The largest and best variety, color red, excellent quality, hardy and vigorous grower.

DAMSON-Small, oval fruit, purple, hardy, productive.

GERMAN PRUNE-Medium, oval fruit, purple, fine quality.

GREEN GAGE-Small, delicious, very prolific, fine quality.

LOMBARD-Medium, red, juicy, hardy and productive.

RED JUNE-Large, red, fine quality; strong, vigorous grower. Finest extra early plum.

SHIPPERS PRIDE-Large, rich, dark purple fruit. Flesh sweet and firm.

Mulberries

Price \$1.00 each: \$10.00 per dozen

DOWNING'S EVERBEARING—One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits, hardy; fruits about three

NEW AMERICAN-An everbearing variety; large fruit of the finest flavor. hardy; fruits about three months.

DISTANCES FOR PLANTING, Appres, 30 to 40 feet. Pears, 18 to 20 feet. Quinces, 10 to 12 feet. Peaches, 16 to 18 feet. Cherries, sweet, 18 to 20 feet. Cherries, sour, 15 to 18 feet. Plums, 16 to 20 feet.

ALL PRICES IN THIS CATALOGUE SUBJECT TO CHANGE WITHOUT NOTICE. WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES.

Grape Vines, Small Fruits, Asparagus, Etc.

We do not guarantee to replace Plants, Shrubs or Trees.

Grape Vines

All Two-Year-Old Selected Stock

20c each: \$2.00 per dozen

Biack or Purple Grapes

CAMPBELL'S EARLY-Bunch and berry large, glossy, black, sweet and juicy; fine quality.

*CONCORD-Large, black grape, hardy and productive; juicy and sweet. EARLY OHIO-Earliest black grape known; healthy and vigorous grower. EATON-Bunch and berries very large, skin black and finest quality. *IVES' SEEDLING-Dark purple, sweet.

25c each; \$2.50 per dozen

BRIGHTON-Bunch large, berries, red, round, excellent flavor; one of the

*CATAWBA-Berries large, round, when ripe a dark copper color; sweet, rich, musky flavor.

DELAWARE-Small, light red, thin skin, very juicy, sweet, fine flavor.

White or Yellow Grapes

25c each: \$2.50 per dozen

**NIAGARA—Vine remarkably hardy and strong grower; bunches very large and compact; berries large, greenish white, slightly ambered in the sun; skin thin but tough, and does not crack.

POCKLINGTON—A seedling of the Concord, resembling that variety in leaf, vine, habit of growth, hardiness and productiveness. Bunch and berry very large; attractive golden vellow color. *Varieties marked with a * are best for arbors.

BLACKBERRIES

90c. per Dozen; \$6.00 per 100.

ANCIENT BRITON-Large fruit, stems loaded with good sized berries of fine quality; vigorous grower, hardy.

EARLY HARVEST-Very prolific, choice variety.

BLOWER-Large, luscious berries, rich in quality and quantity.

ELDORADO-Large fruit, borne in clusters and ripen well together, fine quality, good keeper.

MERSEREAU—Extremely hardy, berries sweet, rich, melting and luscious without core. Good keeper and shipper.

SNYDER-Medium size, sweet and juicy; extremely hardy and very productive.

DEWBERRY

LUCRETIA—One of the low-growing, trailing blackberries. In earliness, size and quality it equals any of the tall-growing sorts. It has proven highly satisfactory wherever tried, and many say it is the best of the blackberry family....................... 90c. per doz.; \$6.00 per 100

CURRANTS

30c each; \$3.00 per dozen

BLACK CHAMPION-Large bunch and berry, excellent quality, strong grower, very productive.

CHERRY-Fruit large, bunch small, deep red, acid.

FAY'S PROLIFIC-Extra large stems and berries, color rich red, fine quality, very productive.

POMONA-Bright red, extra fine quality and enormously productive; strong vigorous grower.

RED DUTCH-An old favorite variety with large red berries.

WHITE GRAPE—Large, yellowish white, sweet, excellent quality and valuable for the table.

GOOSEBERRIES

35c each; \$3.50 per dozen

DOWNINGS-Very large and fine quality. HOUGHTON-Medium size, very productive.

SMITH'S IMPROVED-Large, thin skin, best for table use.

RASPBERRIES

75c per Dozen: \$5.00 per 100

ST. REGIS—Fruit commences to ripen with the earliest and continuing on young canes until October, many quarts often being picked after the first snow fall. Berries bright crimson, large size, rich, sugary with full raspberry flavor. Flesh firm and meaty, a good shipper. Wonderfully prolific. Canes stocky, of strong growth, with abundance of dark green leathery foliage.

RED JACKET—Large size, light crimson color, good quality and firm, vigorous, and productive. One of the best, well-tested, large early berries for the North.

CUMBERLAND—The largest black cap; a healthy, vigorous grower; very productive and of finest quality.

CUTHBERT—Large, firm, deep rich crimson, of excellent quality, tall, strong, vigorous, perfectly hardy and very productive. Ripens medium

GREGG-A large black variety, fruit firm, of excellent quality and a good

SPRING STRAWBERRIES

25 plants 50 cents; 100 plants \$1.25

AROMA (Per.)—One of the finest for long distance shipping. The large berries are bright red to the center. Of conical shape, with prominent yellow seeds that help to make them very attractive on market. The quality is such that it is a leader with many growers.

BURBACH (P) (Imp.)—This variety is famous for its beautifully colored, large berries and mammoth crops.

GANDY (Per.)—Another old favorite. Its popularity, instead of decreasing, is steadily increasing. The fruit is a dark red with dark red seeds. A very late berry that does best on a heavy clay soil. Should be planted with the Senator Dunlap as fertilizer.

HAVERLAND (Imp.)-It has always proven to be one of the best varieties.

HERITAGE (Per.)—The plants of this variety are good growers. The fruit is unusually large for one that continues to bear throughout the berry

SENATOR DUNLAP (Per.)—The demand for this variety has been increasing steadily, as it has an unusually long fruiting season. It bears immense quantities of large, handsome, rich, fine-flavored, dark red berries.

FALL BEARING STRAWBERRIES

Superb and Progressive

50c per Dozen; \$2.50 per 100

ASPARAGUS ROOTS

May be either planted in fal. or spring. Dig up your ground deep, put plenty of well-rotted manure throughly mixed in the soil, throw out a bed about plenty of well-rotted manure throughly mixed in the soil, throw out a bed about four to five inches deep, lay the plants in by spreading the roots out well and scatter the dirt over the plants about four inches, or the depth of the ground thrown out, firm the dirt well around the plants by patting it down with spade or shovel, then top dress the ground with about three inches of well-rotted manure, and scatter salt enough over the top of this to make the ground white enough to track a rabbit. The second year after planting you will be able to harvest enough asparagus for a good-sized family from a bed of about 200 plants. You can plant about 200 plants in a bed three feet wide and fifteen feet long. You should keep the crown of the asparagus cut regularly so it will produce from three and one-half to seven pounds of asparagus, and when planted in small beds, where it can be well mulched and cared for, will even do much better than this. It is necessary to start with good roots. It depends much more on the care taken of the plants and the plant food given them than it does the variety planted. Salt should be put on at the end of every season, in the spring of the year.

ASPARAGUS ROOTS-Two-year-oid

	Per	Per
	100	1,000
Barr's Mammoth\$	1.50	\$9.00
Giant Argenteiul	1.50	9.00
Conover's Colossai	1.50	9.00
Palmetto	1.50	9.00

DISTANCES FOR PLANTING. Grapes, rows 10 to 16 feet apart, 7 to 10 feet in rows. Blackberries, 6 to 7 feet apart, 3 to 5 feet in rows. Currants, 4 feet apart each way. Gooeeberries, 4 feet apart each way. Raspberries, rows 5 feet apart, 3 feet in rows. Strawberries, for field culture, rows 3 to 31/2 feet apart, 1 to 11/2 feet in rows; for Garden Culture, plant in beds 4 feet wide, 3 rows in each bed, plants 1 foot apart in rows.

HARDY PERENNIAL PLANTS

The old-time Perennials are coming to be more widely known and planted with each year. No hardy border is quite complete without it being interplanted with some of these choice specimen, and the whole border filled with

Perennials is a joy every day during the flowering season.

A very effective way of planting, especially when the space is long, is to use a large quantity of plants and a few varieties whose blooming season follows each other in quick succession. It is a good idea to plant the whole border in small groups so that the entire space is attractive with flowers of one kind, and perhaps one or two colors. If this plan is followed, the border cannot present a whole mass of bloom, but there are pleasant changes almost every week during the season.

The preparation of a Perennial bed should be very thorough, especially as the soil cannot be well tended or much enriched afterward. If the subsoil does not permit sufficient under-drainage to prevent water staying on the surface

then under-drainage to the depth of at least two and a half feet will be necessary.

A first-class Perennial bed, suited to sustain a large variety of plants in vigorous growth, should have the ground made loose to a depth of at least two feet. A satisfactory method is to throw off the top soil, then dig over the subsoil and mix with it a liberal amount of sheep manure. If the soil is a stiff clay, an application of about two inches of screened coal ashes or sand worked into the soil will keep it loose.

The top, if possible, should be good rich loam (see page 90), well mixed with sheep manure and put in a fine, pulverized condition. Keep the surface soil rich at all times, since many of the plants are shallow rooted and need a very

mellow soil.

AQUILEGIA (Columbine)

STIMUPLANT . Makes a WONDER GARDEN

HIBISCUS (Mallow)

This is one of the best Perennials for borders or edges of shrubbery. They do best in partial shade.

LONG SPURRED HYBRIDS 20c each. \$2.00 dozen.

ASTER, HARDY (Michaelmas Daisy)

Hardy Asters are easy of cultivation in ordinary soils and exposures20c\$2.00

CAMPANULA (Beliflowers)—These are well-known bienniais and perennials which are easily grown in any garden and give fine borders 200 Per dozen \$2.00

CHRYSANTHEMUMS (Hardy)

These are universally popular for outdoor bedding. They produce a lavish profusion of blooms, giving color, life and beauty to the garden just at a time when other plants have been destroyed by frost or looking their worst. They are quite hardy if planted in a well-drained position, and, with a slight covering of leaves or litter during the winter, will take care of themselves after once planted. Rach, 20c: Per Dozen.

COREOPSIS LANCEOLATA—Bright golden yellow, blooming In profusion all summer. Each.......20c Per Dozen......\$2.00

DELPHINIUM (Larkspur)

These are deservedly one of the most popular subjects in the hardy border, bold, attractive, and highly prepossessing plants of easiest culture; perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment.

DELPHINIUM BELLADONNA—The freest and most continuous blooming of all. Each20c Per Dozen Per Dozen.....\$2.00

DELPHINIUM FORMOSUM—Dark blue, white center, spikes three to four feet tall, vigorous; free blooming. Each 20c Per Dozen \$2.00

DELPHINIUM HYBRIDS—A beautiful collection of wonderfully developed plants of brilliant and showy flowers. Each, 20c. Per Dozen. \$2.00

DIGITALIS (Foxglove)

The strong flowerstalks—frequently 4 to 6 feet high—rising from rich and luxuriant masses of leaves, always give an appearance of strength to the hardy border, and during their period of flowering dominate the whole garden. Assorted, Each....20c Per Dozen....\$2.00

FORGET-ME-NOT

MYOSOTIS PALUSTRIS SEMPERFLORENS-A variety that is hardly ever out of flower; useful in a shady spot in the border and for forcing cut flowers in the winter. Each.....20c Per Dozen.... Per Dozen.....\$2.00

GAILLARDIA (Blanket Flower)

GRANDIFLORA.—One of the showiest hardy plants, growing about 2 feet high and succeeding in any soil in a sunny position. The centre is dark-red brown, while the petals are marked with rings of brilliant crimson, orange and vermilion. Each.....20c Per Dozen.....\$2.00

GYPSOPHILA (Baby's Breath)

Will thrive in any soil in a sunny position, and on account of their gracefully arranged large panicles of minute flowers should be in every garden.

PANICULATA—A beautiful old-fashioned plant, possessing a grace

Each.....20c Per Dozen.....\$2.00 not found in any other perennial. Each.....20c

MALLOW MARVELS—A robust type of upright habit, producing an abundance of flowers of enormous size in all the richest shades of crimson, pink and white; mixed colors. Each...20c Per Dozen...\$2.00

HOLLYHOCKS

Growing 5 to 6 feet tall, these plants produce a pleasing effect planted either in rows on the lawn or among shrubbery. They require a deep rich soil, and a sunny situation, and will repay a little extra attention given them.

Double flowering in colors. Each......20c Per Dozen......\$2.00

PEONIES

The Peony of all the hardy outdoor plants is perhaps the oldest and best known inhabitant of the flower garden, and in the improved double forms offered by us the gorgeous display of blooms in the month of June is unequalled, the flowers being perfectly double, many being very fragrant and all of massive size.

We can supply large clumps of many varieties of Peonies from 50c to

\$1.50 each.

PHLOX (Hardy)

PHLOX DECUSSATA—This is one of the most useful flowers for PHLOX DECUSSATA—This is one of the most useful inovers for summer decoration, the colors varying from pure white to deep crimson. They are not at all particular as to soil, and are exceedingly hardy. To obtain good results it is wise to manure the soil well and give them a fairly open situation, and an occasional soaking of water during very dry weather. Once planted they require no further attention for several years, but it is advisable to renew them about every fifth year. Price, Assorted Varieties, Each....20c Per Dozen....\$2.00

PHYSALIS (Chinese Lantern Plant)

FRANCHETTI—An ornamental variety of the Winter Cherry, forming dense bushes about 2 feet high, producing freely its bright orange-scarlet lantern-like fruit which, when cut, will last all winter. Very attractive plant. Each, 20c. Per Dozen.

PINKS (Hardy Garden)

DIANTHUS PLUMARIUS—(Hardy Garden or Pheasant Eye Pinks.) These "Clove Pinks," so much used for edgings of old-fashioned gardens, bloom most profusely during May and June. They grow about a foot high, and bear double flowers resembling small carnations. We have white, pink and red. Each 20t Per Dozen..\$2.00

POPPY (Oriental)

Perennial poppies are of the easiest culture; almost any kind of

RUDBECKIA (Cone-flower)

Grow and thrive anywhere, giving a wealth of bloom, which is well suited for cutting.

"GOLDEN GLOW"—Produces masses of double golden yellow Cactus
Dahlia-like flowers from July to September. Each....20c Dozen....\$2.00

SEDUM (Stone Crop)

SHASTA DAISY

Large, snowy-white flowers, in bloom continuously throughout summer and fall. Each.........20c Per Dozen.......\$2.00 the summer and fall.

SWEET WILLIAM

DIANTHUS BARBATUS—These old-fashioned favorites are prized border plants. There is a great variety of rich colors, and the flowers are very fragrant. Each...........20c Per Dozen....\$2.00

TRITOMA (Red Hot Poker, Flame Flower or Torch Lily)

PFITZERII—(The Everblooming Flame Flower.) In bloom from August to November, a rich orange-scarlet, producing a grand effect, either planted singly in the border or in masses. Each, 20c. Per Dozen...\$2.00

SUMMER FLOWERING BULBS

These include many of our most attractive plants both for foliage and flowers. As a rule they should be planted out of doors after the weather has become settled and warm. After the first frost and the leaves have turned droopy or yellow, take up and put in a dry cellar or some other place where they will not freeze, storing in paper bags or soil preferably, and then replanting the following year.

CANNAS

The wonderful improvement to which this popular bedding plant has been developed makes it today one of the best of all summer flowering plants both for flowers and foliage. Its ornamental leaves varying from light pea green to darkest brilliant maroons and bronzes can be used most effectively both in borders or beds. The flower spikes have been developed to enormous size and individual flowers sometimes measure 2 inches across. They are of the most brilliant colors, including all shades from creamy white through pure lemon yellow, orange, salmon, pink, scarlet to deep red velvety maroons. Many of the flowers are tinged with gold, some spotted and others striped until there is a gorgeous display which continues to bloom from early summer until cut by frost.

For best results beds should be deeply spaded and a liberal amount of well rotted manure dug in. A mass of the different colors can be planted together or single plants are effective—the arrangement being largely dictated by

one's own taste.

Prices of named varieties—Dormant Roots—each, 10c; dozen, \$1.00; by mail, \$1.15 dozen.

GREEN FOLIAGE

AUSTRIA-Pure canary-yellow; fine large open flowers, with few reddish dots in the center of the two in-

side petals. 4 feet.

EUREKA—The genuine, practical White Canna is found at last. With the advent of Eureka, we are granted good, full-trusses; broad petals; uniform, free and continuous bloom, and a clean, waxy, lily-white color. Plant growth sturdy, with nice foliage. $4\frac{1}{2}$ feet.

LOUISIANA-Very large, beautiful, vivid, scarlet, orchid-like flowers, often measuring five to six inches across. Foliage a glossy green, edged with a narrow 6 feet.

QUEEN CHARLOTTE—The center of the petal is a brilliant crimson-scarlet, shaded with crimson and bordered

with a wide belt of gold. 3 feet high.

CITY OF PORTLAND—A wonderful bright rosepink, much deeper in color than Hungaria. A free-flowering

HUNGARIA—Large flowers, borne in trusses of immense size. Color a pure La France pink with satiny sheen. The most popular pink; green foliage. 3½ feet.

TUBEROSES

Well known summer flower, having a very sweet scent. Bulbs may be planted outside from April to June.

EXCELSIOR DWARF PEARL -The best of all double Tuberoses, producing very large finely formed flowers. First size bulbs, 10c each; 85c doz.; \$5.75 per 100.



CALADIUM OR ELEPHANT EAR

13 to 15 "

15 to 17 "

CALADIUMS (Elephant's Ear)

A vigorous growing plant which has tremendously large, pendulous leaves borne on long stiff stems. Inrich soil, and with an abundance of moisture, assumes very large growth and is most * effective either singly on lawns or planted in centers of beds or as backgrounds for other blooming plants.

50c

90c

				0 1	
7 to	9	in.	circumference	each 10c	dozen \$1.00
9 to	11	"	"	15c	1.50
11 to	13	"	"	30c	3.25
			Mammoth Siz	ZA.	

PANAMA—3 feet. Orange-red bordered with golden yellow.

METEOR—The best deep red large-flowered Canna, with massive erect trusses of deep-red flowers. 5 feet.

MADAM CROZY—Vermillion with golden borders. Green foliage. $3\frac{1}{2}$ feet.

THE PRESIDENT—(New). 4 feet. Rich, glowing scarlet. Large, full flowers.

ROSEA GIGANTEA—Giant flowers of soft rose to carmine pink. $3\frac{1}{2}$ feet.

VENUS—Rose pink, creamy-yellow border. 4 feet.

YELLOW HUMBERT—Has the same habit of growth as the King Humbert. Has green foliage and produces yellow flowers, dotted with red. 4 to 5 feet.

BRONZE LEAVED

KING HUMBERT-In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter. Produced in gigantic trusses, a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery-bronze. 5 feet.

SHENANDOAH—4 feet. Flowers salmon-pink borne in large clusters, foliage rich ruby-red.

OUR 1925 MIXED SELECTED COLLECTION Per Doz....75c By Mail....90c

MADEIRA VINES

MADEIRA VINES (Mexican Potato) - A rapid growing vine with bright, smooth leaves which produce intense shade and valuable for covering fences, outbuildings, or screening porches. Plant the roots 2 inches deep. Vines should be trailed on strings or poles.

Strong roots 5c each; 40c doz.; \$3.00 per 100.

NOTICE

Our Annual Fall Bulb Catalogue will be ready for mailing about the 1st of September, furnishing a complete assortment of Bulbs and Plants for fall plantings, also Sundries, Fertilizer, etc.

> If you desire this catalogue, please send us your name at once

DAHLIAS

READY ABOUT APRIL 1st.

One of the most satisfactory of the summer flowering roots, producing an abundance of brilliant colored flowers from July to frost. The different varieties comprise all colors from purest white to deepest maroon. Many of them in two or more colors with edged petals; some double with quilled petals, others broad, flat petals, some twisted and curled, and comprise many fantastic shapes. There are several classes. Our stock embraces the best varieties and prices are very reasonable.

Culture—Plant from April to July. Do not allow over three stocks to grow. Stake the plants. Keeping the suckers pulled off will produce the finest blooms. After frost dig and store in a dry place where they will not freeze,

Our stock is CHOICE FIELD GROWN Roots, strong division.

PRICE ALL VARIETIES (except when noted) in customer's assortment, separate varieties as desired. Each, 20c; \$2.00 per doz. \$15.00 per 100. BY MAIL, \$2.20 per doz.

CACTUS DAHLIAS.

J. H. JACKSON—Still one of the best and most reliable of the so-called black Dahlias; rich velvety maroon, shaded black. A fine large flower and a free bloomer.

PRINCE OF YELLOWS—A rich canary-yellow, broad petals, tips fringed.

COUNTESS OF LONSDALE—A peculiar but pleasing blending of salmon-pink and amber, a color difficult to describe.

CANDEUR-Pure white.

DUCHESS OF MARLBORO—A magnificent cactus, most pleasing and effective; rich pinkish plum. The flowers are of splendid form.

SHOW AND FANCY DAHLIAS

· KALAMAZOO—Beautifully variegated yellow and white. Very striking. Large flower.

BRIDE—White tipped lavender, very fine.

A. D. LIVONI—Beautiful soft pink. Well formed flowers with long stems. Perfectly round, ball-shaped flowers, each petal being very tightly quilled and arranged in exact regularity. Free flowering.

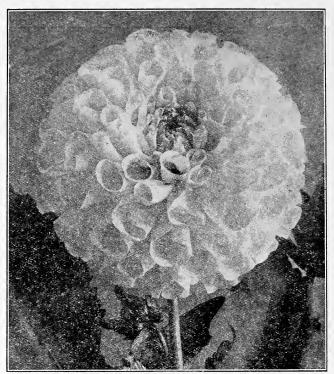
 $\ensuremath{\mathsf{MRS}}.$ $\ensuremath{\mathsf{DEXTER}}\xspace$ Orange yellow, long stems, a profuse early bloomer.

SNOWBALL—Pure white, one of the best for cutting.

DECORATIVE DAHLIAS

FRANK L. BASSATT—Clear purple, very profuse bloomer.

DOAZON—Beautiful orange red, very large flower. A prolific bloomer. No collection should be without this variety.



SHOW OR FANCY DAHLIA

DECORATIVE DAHLIAS—Continued.

JOHN WANAMAKER—Color soft orchid pink. An extremely early bloomer.

KING OF THE AUTUMN—One of the finest Decorative Dahlias ever introduced. The habit is absolutely perfect, with strong, sturdy stalks; long stiff stems and remarkably free-flowering. The coloring is something quite new and unique, buff yellow suffused terra cotta. Obtaining several First-class Certificates in Holland, this Dahlia is destined to become one of the most popular varieties ever introduced. 35c each; \$3.50 doz.

REUBEN MOORE—Glistening white center, shading to beautiful shell pink on outer petals. Long stems and very free flowering. A new variety. 35c each; \$3.50 doz.

SINGLE DAHLIAS

BLANCHE—The flowers are large and very attractive, being a pale yellow at the base, faintly tipped pink with a cast of pure white over the whole flower, making it one of the most delicate varieties to date.

 $\mbox{\bf BIG}$ CHIEF CENTURY—Velvety red, large flower with fernlike foliage.

ROSE PINK CENTURY—Bright pink.

Our 1925 Mixed Dahlia Collection

Composed only of selected varieties.

Nothing under one dozen sold.

PER DOZEN....\$1.50 BY MAIL......\$1.65

GLADIOLUS

The Gladiolus is one of the most decorative plants in the garden, and as a cut flower lends itself readily to any arrangement. If the spikes are cut when the lowest flower is in bloom, the others will open in succession and remain fresh a

week or ten days.

Gladioli will thrive in almost any good soil except a stiff clay. They require full sunlight and are liable to injury only Plant the bulbs six to nine inches apart, the large ones four inches and the small ones two inches from rank manue. deep. Make an early planting of the smallest bulbs first as soon as the ground is sufficiently dry and warm. Continue to plant at intervals of two weeks during the spring and early summer; in this way a succession of bloom may be had from

midsummer until frost. A free use of water during the season of active growth, particularly as the buds begin to show color, will be beneficial in producing fine blossoms. In the autumn, before freezing, they should be dug and the tops allowed to dry down, after which the dry tops, earth and old bulbs can be removed. Store in a cool, dry place, secure from frost until spring.

NEW AND RARE GLADIOLUS

LE MARECHAL FOCH—A bright soft pink, with the earliness of Halley, one of the largest gladioli flowers in the world. 15c each; \$1.50 per doz.

FLORA—Beautiful golden yellow, large flowers. 20c each; \$2.00 per doz., \$15.00 per 100.

RED EMPEROR—A very large deep scarlet of immense size. 20c each; \$2.00 per doz.; \$15.00 per 100.

MR. MARK—Light blue with darker spots. 15c each; \$1.50 per doz.; \$12.00 per 100.

LOVELINESS—Creamy white, large flower. 15c each; \$1.50 per doz.

MAIDEN'S BLUSH—Beautiful light pink color and very free flowering. Generally has two spikes. 15c each; \$1.50 per doz.

NAMED VARIETIES.

These comprise some of the choicest sorts.

If by mail add 5c per dozen for postage.

AMERICA—A beautiful soft pink lavender, shading to very light, almost white. A most charming and attractive sort. 7c each; 60c per doz.; \$4.00 per 100.

CHEERFULNESS—Deep blood red, striped with dark

blue. Large flower and very conspicuous. 8c each; 80c per doz.; \$6.25 per 100.

LA GRANDESSE—Fine large flower, white slightly

tinting into light pink. 7c each; 75c per doz.; \$6.00 per 100.

HALLEY—A delicate salmon pink with roseate tinge. The lower petals have a creamy blotch with a stripe of bright red through the center. The best of all salmon pinks. 6c each; 65c per doz.; \$4.50 per 100. YELLOW HAMMER—Pure yellow, e. grower. 7c each; 75c per doz.; \$6.00 per 100.

extra strong

BARON HULOT—Deep violet blue. 10c each;

\$1.00 per doz.; \$8.00 per 100.
PRINCE OF WALES—Delicate salmon pink rose, of great value. 10c each; \$1.00 per doz.; \$8.00 per 100. GOLIATH—Extra fine dark purplish maroon. 8c each;

80c per doz.; \$6.25 per 100.

MRS. FRANCIS KING—Brilliant vermillion scarlet borne on long spikes. Flowers enormous, sometimes $4\frac{1}{2}$ inches across. Most excellent. 7c each; 60c per doz.; \$4.00 per 100.

PANAMA—Extra fine pink. 8c each; 80c per doz.;

\$6.00 per 100.

MRS. FRANK PENDLETON—Large pink flowers with deep carmine blotch. 7c each; 75c per doz.; \$6.00

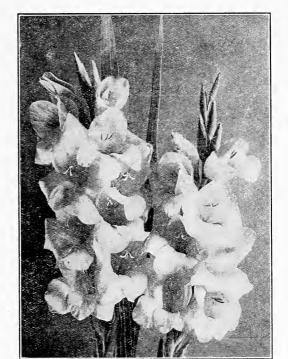
NIAGARA—Creamy yellow. 7c each; 75c doz.; \$6.00 per 100.

SEPARATE COLORS.

SCARLET AND CRIMSON—7c each; 60c per doz.; \$4.00 per 100.

WHITE AND LIGHT-7c each; 60c per doz.; \$4.00 per 100

PINK SHADES—7c each; **60c** per doz.; **\$4.00** per 100.



AMERICA GLADIOLUS

BLUE SHADES—7c each; 60c per doz.; \$4.00 per 100. YELLOW AND ORANGE-7c each; 60c per doz.; \$4.00 per 100.

MIXED GLADIOLUS.

SUPERB MIXTURES — Largest size bulbs. Brilliant colors and shades. 5c each; 50c per doz.; \$3.50 per 100.

HARDY LILIES.

Lilies are stately and most beautiful bulbous plants producing large flowers of exquisite outline and varied coloring. They are hardy even in cold locations with protection, and usually surviving for many years. Ideal locations are in the shrubbery or herbaceous border where the roots are sheltered from the hot sun. Groups of 6 or more lilies of a kind, here and there, in such situations are most effective. Large isolated clumps or beds of the varieties Auratum or Rubrum, are very beautiful. They should be planted 6 to 8 inches below the surface in light soils, or 4 to 5 inches below in heavy soils; in the latter case the bulbs should be surrounded by sand to facilitate drainage.

AURATUM (Gold-Banded Lily)—A magnificent sort producing large broad creamy white flowers spotted with maroon and having a broad band of gold extending the length of each petal. Large size bulbs 35c each; \$3.50 doz.

SPECIOSUM RUBRUM—A magnificent sort. Color blush white with dark maroon spots. Very effective and handsome. Each 35c; doz. \$3.50.

If Gladiolus Bulbs are wanted by mail, add 5c per dozen for postage.

GENERAL LIST OF GRASS SEEDS



As the prices of many of the following seeds are subject to weekly and sometimes daily fluctuations we can not give them here but will be pleased to quote lowest market prices at any time.

If orders are entrusted to us they will be filled at the lowest market prices on the day received.

IF GRASS OR CLOVER SEEDS ARE TO BE SENT BY MAIL ADD 5c PER LB. EXTRA FOR POSTAGE.

ORCHARD GRASS. (Dactylis glomerata)

Particularly suited to up land, loamy or moderately stiff soils. It ripens 3 weeks ahead of Timothy and is excellent to sow with Red Clover. It should be cut when in bloom as at that time makes most nutritious hay but if allowed to become old it contains a great deal of woody fibre; usually yields two crops and is one of the most valuable grasses for both pasturage and hay.

If sown alone it requires $1\frac{1}{2}$ to 2 bus. per acre; if with Red Clover 1 to 1½ bus. of Orchard Grass to 5 to 6 lbs. of Red Clo-If for seed the same quantity of Clover and 34 of a bu. to 1 bu. of Orchard Grass.

"ACME" JNE Best—Current prices on request.

TIMOTHY. (Phleum pratense)

Too well known to need description. It is the most desirable of all grasses for hay but should not be grazed as the tramping of cattle hoofs causes it to die. In this section Timothy is best suited to low, flat or alluvial soils where there is a fair amount of moisture but does not grow well in water sogged soil. Requires alone, 1 pk, per acre; if with Clover, 8 lbs. Timothy and 5 to 6 lbs. of Clover.



ORCHARD GRASS

"ACME" ME Best-Bags extra.

RED TOP OR HERD'S GRASS.

(Agrostis Vulgaris)

Particularly suited to low and wet situations and affording a splendid pasturage and fair crops of hay. Ripens at about the same time as Timothy and excellent to sow with this grass if pasturing of meadows is It is also valuable to sow on alluvial contemplated. land liable to wash and when once established and some care taken will last indefinitely.

Seed is of three classes:

FANCY (free of chaff) requires 8 to 10 lbs. alone or 3 to 4 lbs. (in mixtures) per acre.

"ACME" EN Best Fancy—Current prices on request.

Export Fancy--Current prices on request.

UNHULLED (seed with hull on) 1 bu. per acre.

CHAFF Current price on request.

TALL MEADOW OAT GRASS. (Arrhentherum elatius)

A very fine grass which is suitable for upland soils and especially valuable for mixture with Orchard grass. It ripens about the same time and does not have a tendency to grow in clumps or tufts—hence, forms a better sod. Cut when in bloom it is very nutritious and it affords wonderful amount of pasturage. Requires alone 1½ to 2 bus. per acre; in mixtures from $\frac{1}{2}$ to $\frac{3}{4}$ of a bu.

"ACME" ME Best—Current prices on request.

GENERAL LIST OF GRASS SEEDS—Cont'd

MEADOW FESCUE

(Festuca elatior)

A most valuable grass for pasture and affords good crops of hay where particularly suited. It grows best on low damp soil and is especially desirable for all permanent pastures. (Called Evergreen Grass in some sections).

Requires one bu. per acre, if alone. In mixture, from ½ to ¾ of a bu.

"ACME" ME Best-Current Price on request.

KENTUCKY BLUE GRASS. (Poa pratensis)

A well known pasture grass which grows well on any stiff or loamy soil in central or northern states. It is indigenous to sections of Ohio, Kentucky and Missouri and in these sections is the main grass depended on for pasture or for stock grazing for which these sections are famous. There is no better or more nutritious pas-

Kentucky Blue Grass is also largely used for lawns and when once established lasts indefinitely. It is slow starting, however, and for lawns should be mixed with other quick growing short grasses. For pastures, sow 11/2 to 2 bus. per acre; for lawns, 4 to 5 bus. per acre.



KY. BLUE GRASS

CANADIAN BLUE GRASS. (Poa compressa)

Closely akin to Kentucky Blue Grass but not nearly so valuable for general purposes. Canadian Blue Grass is particularly well suited to high, dry situations and rocky soil, also under trees where the soil is more or less impoverished and very dry. It does not make a very good turf as it produces a large amount of stems and comparatively little forage. Valuable for mixtures and upland soil for pasture.

PERENNIAL RYE GRASS. (Lolium perenne)

A quick growing grass which is most suitable for mixtures, pastures, hay and lawns. Succeeds well on almost any soil not water sogged and affords good quick, nutritious grazing. If alone requires 1½ bu. per acre. In mixture, from 2 to 3 pks. per acre.

PACEY'S IMPROVED SHORT RYE GRASS.

Similar to above except that it does not grow quite so tall and is superior for lawns and fine pastures to Perennial Rye Grass.

ITALIAN RYE GRASS. (Lolium italieum)

In growth somewhat similar to Perennial Rye Grass but little quicker maturing. It is especially liked in Southern States and in most of the low Delta country yields good crops of very early hay. Valuable for mixture or quick hay crop. Requires same quantity per acre as Perennial.

"ACME" JME Best.

SHEEP FESCUE. (Festuca ovina)

An extremely valuable pasture grass for high, dry situations or rocky or gravelly soils. It affords excellent grazing and withstands adverse conditions often when many other varieties burn out. The foliage is of fine texture and it has a tendency to grow in tufts and close grazing is desirable. Especially valuable for mixture.

Requires alone 11/2 to 2 bus. per acre. In mixture 1/2 to 1 bu.

"ACME" EME Best.

CRESTED DOGSTAIL. (Cynosurus cristatus)

Very much esteemed for lawns and mixtures in many of the northern states, producing a quick growth of short grass, which is, however, of little forage and many stems.

SPECIAL MIXTURES FOR PASTURES. MEADOWS, Etc.

ME BEST SPECIAL MIXTURES FOR GOLF COURSES, POLO GROUNDS, ATHLETIC COURSES AND LAWNS.

We supply in this vicinity nearly all of the cemeteries, public parks, golf courses and other places where considerable quantities of grass seed are used and are prepared to make very reasonable prices for highest quality seed.

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer mixtures which can be relied on to be the very highest quality and prices are very reasonable. See page 3 for descriptions.

Constant experimenting has shown that a heavy stand and prolonged growth can only be obtained by sowing a MIXTURE OF SEVERAL KINDS OF GRASS SEEDS. In our special mixtures we use varieties best suited to the different soils and purposes for which they are recommended. Those for permanent pasture are composed of grasses that succeed each other in growth thus furnishing good grazing from early spring until late fall.

Nothing but our "Acme" JME Best-grades are used which means the best obtainable. We will be glad to give you the benefit of our knowledge and experience and advise you as to grasses suitable to your wants.

CLOVER—Grass and Grain Seeders, see page 87.

"ACME" IN CLOVER SEEDS

Prices are so changeable they can not be given here. Will be glad to submit prices and samples at any time. Bags for Clover Seed holding $2\frac{1}{2}$ bus. extra and must be remitted for on all orders.

RED CLOVER. (Trifolium pratense)

Too well known to need extended description. Can be sown either in the spring or fall and requires 1/8 to 1/6 of a bu. per acre alone or 5 to 6 lbs. per acre if in mixture with grasses.

"ACME" ME Best — Bags extra. Current prices on request.

MAMMOTH OR SAPLING CLOVER.

Similar to Red Clover but of larger growth and blooms 3 weeks later—hence, more valuable for sowing with Timothy. It also forms better aftermath than Red Clover. Requires same quantity of seed as Red Clover per acre. Current prices on request.

ALSIKE CLOVER (also called Swedish Clover).

Similar in growth to Red Clover but not quite so vigorous. Blossoms flesh color. Blooms later and at the same time as Timothy. Valuable for hay and more satisfactory for pasturage as it lasts longer and will stand more grazing.

If sown alone requires 5 to 8 lbs. per acre or in

mixture 3 to 4 lbs. per acre.

Bokhara or Sweet Clover.

It is suitable for almost all classes of soil and especially desirable on loamy, sandy or alluvial soils. Formerly it was used mostly for waste lands but many prominent stock raisers are using it extensively for both pasturage and hay, in many cases abandoning Alfalfa and substituting Sweet Clover.

Sweet Clover is of vigorous growth and withstands extremes of heat and cold as the tap roots penetrate the soil very deeply; and it does well on both barren hillside as well as bottom lands. Matures early. Can be cut two or three times in a season; has a delightful and sweet scented odor and the blossoms are particularly attractive to bees.

We offer below 3 classes:

WHITE SWEET CLOVER—A Biennial growing 5 to 6 ft. high having white blossoms borne in large panicles and extremely sweet scented. Reseeds itself if undisturbed or not cut in bloom.

Hulled seed (cleaned seed) requires 12 to 15 lbs. per acre. Bags extra. Current prices on request.

Unhulled (seed in the rough).

YELLOW SWEET CLOVER—A Biennial not quite so tall growing as the White but more desirable for pasture as the life season is much longer, producing an abundant yield of forage.

HUBAM CLOVER—The new annual white sweet clover, Hubam, discovered by H. D. Hughes of the Iowa Agricultural Experiment station, was grown during the last summer on a 140-acre farm near Onowa by some former students of Iowa State College. The clover grew to a height of 8 feet 2 inches in some cases and averaged 4 feet 6 inches.

The seed was sown on both fall and spring plowed lands and the best crops resulted from the fall plowing. Although the season was dry a good return was had. Seed was sown in rows 36 inches apart and 8 to 10 pounds of seed to the acre was found to be a good rate of planting. A return of 200 pounds of seed per acre was received. While this crop was sown in rows for seed recent experiments favor broadcasting as the better method for a uniform stand.

The value of Hubam as a green manure crop is great, say the experts, and the feed value should be good, although the high price of seed has kept experimental tests back. Current prices on request.

Japan Clover. (Lespedeza)

This Clover is especially adapted for the South because it occupies the same position in pasture mixtures for the South that White Clover does in the North. Will thrive on poor land, and as it grows thickly soon furnishes abundant pasturage. Good stands have been secured by simply sowing the seed broadcast during March, April or May at the rate of 10 to 12 lbs. per acre. This Clover is a half-hardy annual without any objectionable root system. (25 lbs. per bushel.) Current prices on request.

WHITE CLOVER. (Trifolium repens)

Well known and indigenous to most soils throughout this section. It is largely used for lawns and pastures, producing very quick growth and covering the soil with a bright, vivid green very thickly. Particularly suited to sandy soils and in some localities where grasses do not grow well.

Requires 3 to 4 lbs. per acre alone or in mixtures 1 to 2 lbs. "ACME" M Best Grade.

Crimson or Scarlet Clover.

This Clover grows about two feet high, makes good hay and is excellent for feeding green, the yield being immense; and after cutting it at once commences to grow again, and continues until freezing weather, but being an annual, dies after maturing its seed. Should be sown in August to October, also early spring. (12 to 15 lbs. per acre.)

Current prices on request.

Alfalfa or Lucerne

Alfalfa is being more generally grown, as experience is teaching our farmers the proper methods to follow. Once established, it is such a profitable crop that every farmer can afford to take great pains to obtain a stand. It requires cutting at least twice the first season, even if not large enough to make hay. Cutting destroys any weeds that may come up in it and gives the Alfalfa a chance. Must be sown at the rate of 20 to 25 pounds per acre when sown broadcast. Different soils do not seem so difficult to overcome, especially where they can be properly drained, pulverized, sweetened and inoculated.

Alfalfa does not thrive on acid or sour land.

A liberal dressing of fine ground lime will be found a great benefit to the soil. May be sown from April 1st to June 15th for the early spring sowing, either drilled or

sown broadcast. If broadcast cover lightly with a light drag or with single stroke of a harrow.

Much seeding is now done later and many prefer sowing from July 15th to September 15th. When seeded late it gives the grower an opportunity to have his land clean and free from weeds, and if weather conditions are favorable a crop is almost assured.

Alfalfa naturally prefers a deep, sandy or gravelly subsoil. Roots from 3 to 15 feet deep and a good stand on properly selected land should yield from 3 to 5 cuttings

a year. Current prices on request.

"ACME" \mathfrak{M}^{\bullet} Best American Seed — Current prices on request.

Best Imported Seed—Current prices on request. Price fluctuates. Ask for quotations.



Inoculate your alfalfa, sweet clover, soy beans, red, alsike, mammoth clovers, vetch, peas, beans and all other legumes (pod bearing plants). McQueen's Inoculator insures a catch, hastens maturity, increases the crop, enriches the soil and means success with legumes. You can start a nitrogen factory on your farm by inoculating your legume seed with McQueen's Inoculator. An inoculated legume takes nitrogen from the air and stores it in the soil for future crops. Simple directions with each package.

Do you want better legume crops than you ever had before?

Do you want to enrich your land so that it will produce better crops of any kind in the future, than it has done before?

Quality above all— Bacteria for all legumes. Then inoculate your seed with McQueen's Inoculator this year.

Sweet clover, alfalfa, soy beans, red clover, vetch, garden peas and beans and all other legumes need lots of nitrogen.

They can't thrive without it more than human beings could without a proper amount of oxygen.

Treatment of the seed with McQueen's Inoculator is the cheapest and surest way of enabling them to get the nitrogen they so vitally need in sufficient quantity to insure a maximum yield.

McQueen's Inoculator has an unequalled record of results.

McQueen's Inoculator is the hardiest and most virile nitrogen fixing bacteria known.

That is because it is bred under nature's conditions, not in a laboratory under hot-house conditions.

It makes poor soil good and good soil rich.

McQueen's Inoculator will enable you to grow better crops than you've ever grown before in field and garden.

McQueen's Inoculator will cost you less per acre because it is sold on the **bushel** basis instead of by acre sizes.

When ordering state the kind of seed you wish to treat.

PRICES

Garden Size, 25c

Add 5c per package for postage

Improves your crop and soil.

GIVE YOUR LAND A SQUARE DEAL-USE

Mr Diceris water

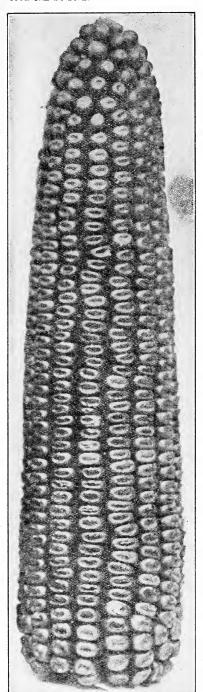
IN SEED CORN IN

All our Field Corn Seed is well matured, thoroughly cured, and shelled with the greatest care. We test all varieties before sending the seed to our customers that there may be no doubt as to the vitality. To avoid delay when ordering late in the season, it would be well for you to mention your second choice, or state whether we shall send you a sort adapted to your locality, or refund your money, provided we are sold out of your first choice when your order arrives.

Put up in two-bushel cotton, seamless bags. Bags, extra.

At this date (January 1, 1925) it is impossible to name a price on field corn that would be fair to all.

Will be glad to quote you prices when planting season arrives and know you will find our prices as low as high grade seed can be sold.



WHITE VARIETIES

EARLY NORTHERN WHITE DENT—A particularly desirable sort for very early planting or very late planting, as it matures its crop in about 90 days. The ears are 8 to 9 inches long, of 16 to 18 rows, which are well filled. Grains moderate, white, dented.

This is largely planted in many sections for green table corn, as it produces 2 good ears to the stalk and is profitable.

HICKORY KING CORN—An old favorite sort which is well known in all localities. The ears are rather small but as they are borne 2 to 3 on a stalk it is a fairly good yielder. It has the largest grains and the smallest cob of any white corn ever introduced. So large are the grains that if an ear is broken off and the grain laid over the cob it will almost cover it. It is particularly fine quality and universally satisfactory.

RED COB ENSILAGE—Beyond doubt one of the best fodder corns, either to feed green, to put up for the silo, or to cure for hay. It is sweet, tender and juicy; has short joints and therefore an abundance of leaves, and grows to a fair height, but coarse-stalked. The seed is white and grows on a red cob, thus giving it the name.

SWEET FODDER CORN—For forage purposes, as it is the best of all corns both as green corn for ensilage or to be cut and used dry. Both the stalks and fodder contain large amounts of saccharine matter, which is both fattening and relished by stock.

YELLOW VARIETIES OF SEED CORN

GOLD STANDARD LEAMING—An ideal feeder's corn of light, golden color; ripening in about 100 days; ears slightly tapering and cylindrical. They grow 8 to 10 inches long, 7 to 8 inches in circumference, and are well filled at the ends. The ears are from 16 to 22 rows, there being little space between them. The cob is red, moderate size and the percentage of corn to cob varies from 86 to 90%. The per cent of protein which the grains contain is more than any other corn that we know of, and 4 bushels of Gold Standard Leaming will put as much fat on a hog or steer as 5 bushels of ordinary corn.

OHIO YELLOW DENT—A medium early yellow variety, producing well-filled ears of good length and filling out remarkably well, even under adverse conditions. Stalks of good height, producing one or two good ears, which average 10 to 11 inches long, 14 to 16 rows. Grains flinty deep; slightly dented, rich color, and fine feeding quality. This is one of the most popular varieties of yellow corn and particularly well liked by stock raisers. Ripens in about 100 days.

IOWA GOLD MINE—An early yellow sort, ripening in 95 days, having good sized ears. It originated in the West, where it is very popular, and east of the Mississippi has found high favor among most growers. Grains are golden yellow, very deep, set on small cobs and an ideal sort for bottom lands or where there is trouble with curing, because it dries out easily and quickly without molding.

PRIDE OF THE NORTH—An extra early variety producing larger ears than Early Butler and just a trifle later. The grains are deep, narrow and set close on the cob. Ears, moderate length, 8 to 9 inches long, usually 2 on the stalk. On account of its quick maturing (90 days) and exceptionally fine yielding qualities, it is especially popular in northern sections for a quick maturing sort or for very early or very late planting in this section. Our stock of this is select, fire dried, butted and tipped.

ME SEED OATS

We are very large handlers of these and always sell the most select stocks which have been carefully recleaned in our own mills. Do not compare our prices on Seed Oats with the ordinary commercial feeding oats which are so often sold for seeding purposes.

WINTER TURF OATS-These are far superior to spring oats in quality and if sown early in the spring will yield a larger and better crop. In good land they grow 4 to 5 ft. high, producing not only the best quality of feeding oats but better and more palatable straw for stock. The grain is very heavy; often a measured bushel weighs 40 to 42 lbs. Very thin husks, the grain or meat being very full and heavy. Requires $1\frac{1}{2}$ to 2 bus. per acre. Special prices in large lots. Current prices on request.

WHITE SPRING OATS-Carefully selected stock thoroughly recleaned in our own mills. Current prices on request.

BLACK SPRING OATS—These usually do better on moderate land or thin land as they grow taller and yield a little better. They make more forage than spring oats and are better to cut green. Bags included. Current prices on request.

SWEDISH SELECT—It is an early white variety, producing grain of good weight and quality. Straw is medium in height and strong. Swedish Select, on account of its vigorous root action, can be recommended for a variety of soils, doing well on nearly all. Our stock of Swedish Select Oats is northern grown in a section of the country that has proven itself especially adapted to this crop. One hundred bushels to the acre is not an uncommon yield. Oats grown in a northern latitude are more vigorous, hardier and mature earlier than stocks grown anywhere else.

COW PEAS

The Great Soil Improving Crop

One of the most productive and nutritious crops grown. The feeding value is high and for ensilage they are unsurpassed. As they are practically a sure crop and nitrogen gathering plant there is no surer or cheaper way of improving and increasing the productiveness of the soil than by sowing Cow Peas. They are entirely different from Canada Field Peas, really belonging to the bean family, therefore must not be sown until the ground is warm.

Will quote current price on application. Sow at rate of 1½ bushels to acre.

WHIPPOORWILL—One of the earliest varieties with brown speckled seed which grows in bush form. It is a favorite sort in the West and North on account of its early maturity and ease of cutting and harvesting.

NEW ERA—In comparison with other sorts we consider New Era one of the very best as it produces an abundant growth of vine and exceedingly large quantity of pods and matures earlier than other sorts. Reports of 40 bus, per acre have been made us and the peas, while smaller than Black or Whippoorwills are fully as nutritious. Seeds are dull, lead-colored and require less per acre than other sorts.

MIXED COW PEAS—A mixture of Clays, Whippoorwills, Blacks, etc., which are somewhat lower in price than the straight sorts and they are just as satisfactory for soiling or hay.

VETCH

HAIRY OR SAND (Vicia Villosa)-It is a winter annual and is especially well adapted to sandy soil and will do much to build up any poor soil. Withstands cold weather. Should be sown from latter part of August to middle of September.

SPRING VETCH (Vicia Sativa)—Used for sowing with oats for producing a spring crop of hay.

CANADA FIELD PEAS-Grown with oats will make a fodder or hay which doubles the production of

milk. Current prices on request.

They should be sown in March or early April, two bushels of peas and two bushels of oats to the acre. The peas should be sown first and plowed under about 4 inches deep; the oats then sowed and harrowed in. be ready for cutting about the end of June, when the oats are in milk and the pods formed on the peas. Prices variable.

SUNFLOWER (Mammoth Russian)—The best variety for the farmer. Drill in seed at the rate of about 7 lbs. to acre. It is much relished by poultry and horses. Current prices on request.



Soja Beans Improve the Soil and Increase Crop Production

Soja Beans do equally well on both light and heavy soils, and in addition to their value as a forage crop, they make a most desirable land improver, not only improving the condition, but adding considerably to the humus and nitrogenous content of the soil, and considerably increasing the productivity for crops to follow. There is no crop that will clean land better than Soja Beans. It is almost impossible for any weeds to grow or thrive where a crop of Soja Beans is sown, and for effectively eradicating wire grass or obnoxious weeds from the soil, we do not know of anything better.

Soja Beans Particularly Valuable for Hogs

Soja Beans are also particularly valuable to plant for hogs. They can be planted by themselves for this purpose, or in the corn rows, and the hogs turned in to feed on the beans after the corn is harvested. Soja Beans contain more protein and fattening qualities than corn.

Prices on Soja Beans fluctuate like those of Cow Peas. Current prices on request.

EARLY YELLOW—Plants stout, erect and bushy, maturing in about 115 days.

ITO SAN—This small yellow bean is one of the best known varieties. It is a heavy seed producer, grows to a height of about 24 inches and matures in about 105 days. Owing to its early maturity, it is excellent as a catch crop. A good variety to sow with corn for hogging down. Although rather short it ranks as a hay-producer.

VIRGINIA—Although inclined to lodge on the richest soils, this has become one of the best known varieties for both hay and silage. It probably makes a higher growth than any other kind, the plants being slender, with vining tendrils. Matures in about 130 days.

MORSE—Light green or olive. A heavy yielder. Matures in about 115 days, growing to a height of 30 inches. A very good bean for hogging down or for hay.

MAMMOTH YELLOW—This is a standard commercial late variety, and is very popular in the South, where it yields an enormous quantity of beans and is satisfactory for both grain and forage.

MEDIUM YELLOW OR A. K. SOJA BEAN—A yellow seeded, medium-maturing variety, especially noted for its upright growth and abundance of leaf development with medium stem. Used largely for hogging off with corn. Matures from 100 to 125 days.

MIDWEST OR HOLLYBROOK EARLY—The earliest yellow seeded variety, making a quicker growth and matures its crop 2 to 3 weeks earlier than Mammoth Yellow Soja Beans. An erect growing plant.

EARLY BROWN—Seed about the size of the Mammoth Yellow, crop being produced earlier. It does not grow as tall, or make as large a yield of either forage or beans as the Mammoth Yellow.

MANCHU—Among the early maturing varieties this stout, erect, bushy growing bean is only second to the Ito San in popularity. It is just a little later, maturing in 105 to 110 days. It is a large seed yielder and excellent for early hay and forage.

WILSON BLACK, BLACK EBONY, BLACK SABLES—Most of these have fine stems and leaves, and are desirable for hay and for silage. Experiment Station reports vary greatly as to time of maturity but the average is from 110 to 120 days.

MILLET

Largely used as a summer hay crop and particularly adapted for rich or bottom soils; also very useful for cleaning rich, foul lands of weeds as its quick, abundant, luxuriant growth smothers most weeds.

Price fluctuates. Ask for current prices.

GOLDEN MILLET (Choice Tennessee Cultivated)—The most popular of Millets and if properly grown makes large and excellent crops of nutritious hay. It should be sown thickly and cut when the heads are in bloom and if for hay never allowed to get old or seed to form as this causes a great drain on the soil, besides materially injuring the quality of the hay.

Tennessee Cultivated Millet is far superior to the common Western stocks. It will produce large crops of hay in 6 to 8 weeks from sowing.

Sow 1 bu. per acre in May, June or July. Two crops can be seeded on the same land a year if desired.

WHITE WONDER MILLET—Produces a very large head similar to the Tennessee Millet. Under certain growing conditions it is quite difficult to distinguish it from the cultivated millet. The heads will run from six to eight inches. A very desirable feature is its earliness; the foliage is also very heavy and the leaves broad, resembling German Millet. It produces an immense amount of excellent fodder which cures very readily.

On account of the earliness, the immense yield of hay and the very vigorous growth which leaves the ground clean, we recommend the sowing of White Wonder Millet.

HUNGARIAN—Specially adapted to rich or alluvial soil. It makes a finer quality of hay than Millet on very rich soil as it does not grow so coarse. Cut at the right time, which is in bloom, and cured properly it makes as nutritious hay as Timothy; is especially popular with dairymen.

Sow from 34 to 1 bu. per acre in May, June or July. Current prices on request.

KAFFIR CORN

A favorite grain crop in the West growing similar to Sorghum. Foliage and stalks, however, do not contain saccharine matter—hence, are not so valuable for feeding but the enormous yield of grain makes it very profitable. The grain is very largely used for poultry and stock feeding, containing a high percentage of starch. Current prices on request.

BARLEY

Barley needs a rich land and lighter than that adapted to Wheat. It should be cut before fully ripe (unless intended for seed), as it is then of better quality and less liable to shell. Sow 1½ to 2 bushels if drilled; 2 to 2½ bushels broadcast. (48 lbs. per bushel.)

Spring Barley, Beardless Barley-Current prices on request.

ROSEN RYE (Michigan Grown)

Grain unusually large and yield surpasses the old standard sorts.

BUCKWHEAT

A splendid soil improving crop for very poor land besides being largely grown for grain in northern and mountainous sections. It is also largely used for bees.

Culture—Sow in June, July or August at the rate of $\frac{3}{4}$ of a bu. to 1 bu. per acre broadcast, covering with a smoothing harrow. It does not mature its grain until the cool nights—hence, too early sowing is not desirable.

Japanese—This produces the largest yield of finest and largest kernel buckwheat. Superior to all other orts. Current price on request.

Silver Hull—Much improved over the common Buckwheat. Grains, however, smaller than Japanese but yielding abundantly. Current price on request.

DWARF ESSEX RAPE

One of the best crops that can be grown for sheep or hog pasture. One acre will furnish enough feed for a dozen sheep for a period of two months. It can be planted from April to August—three pounds to the acre when drilled in, five pounds when sown broadcast. If planted in corn after the last cultivation, it will furnish a fine feed for grazing after the corn is cut. Current prices on request.

SUDAN GRASS

Sudan Grass though of comparatively recent introduction into the United States has spread like wildfire over many sections. It produces an immense yield of hay which is nutritious and can be cut twice in a season. In appearance it resembles Johnson Grass; grows when broad-casted 3 to 5 ft. high, or if cultivated 6 to 10 ft. high, but is more nutritious than Johnson Grass, containing larger amounts of protein and fattening qualities. Its principal value is that it is adapted to almost any kind of soil and succeeds in nearly all climates, but produces the largest yield in warm and temperate latitudes, where there is an abundance of rain-fall. It does not blight, cures easily, is greatly relished by stock and can be easily grown if sown either broadcast or in drills. After the first cutting it stools enormously, and as many as a hundred stalks sometimes come from a single root. After frost Sudan Grass is killed, and entirely unlike Johnson Grass it can be easily gotten rid of, as the winter destroys it entirely.

Culture—Sudan Grass can be sown either in drills $2\frac{1}{2}$ to 3 feet apart at the rate of 2 to 3 lbs. to the acre, and cultivated like corn, or broadcast 15 to 25 lbs. per acre. Seed should be sown about the time of planting corn and the hay cut when the grass is headed out, with a mower or binder. Early cutting is desirable as the hay is more nutritious and gives the grass a better chance for large succeeding crops.

Current prices on request.

SORGHUM OR CANE

Culture—Sow in May, June or July, either in drills 3 ft. apart at the rate of about 1 pk. per acre or broadcast 1 to 1½ bus. per acre. Cut after seed has matured.

Early Amber — A favorite sort in Northern and many Western states. Grows 10 to 12 ft. high. Price fluctuates. Current prices on request.

Red Top or Imphee—A favorite sort in Kentucky and Tennessee and one of the best varieties for general purposes both for stock feeding or making syrup. Current prices on request.

Early Orange—Similar in growth to Amber, except that the head is more spreading. A favorite sort in Southern and Western states where it produces large crops. Current prices on request.

BROOM CORN

This is usually a profitable crop and sometimes enormously profitable. A fair yield is a ton to 3 or 4 acres of ground and the seed is valuable for stock and poultry food in addition to the returns from the broom straw.

Culture—Sow in drills 3 ft. apart at the rate of 3 to 5 lbs. per acre, thinning out stalks to about 70 to the rod. Cultivate as for corn. Rich land requires thicker seeding and more stalks than medium or poor soil. Cut when the seed is in the milk state.

Improved Evergreen—A favorite sort in the middle West producing long, straight straw of greenish appearance after being cut, which commands the highest price. Current prices on request.

Recleaned Bird Seeds, Pet Supplies, Bird Houses, Etc.

It is very important that you make the proper selection of foods for your birds; pure, fresh, clean food is necessary at all times. Our bird seeds are of the highest quality, fresh and recleaned. Your pets will thrive if you get your supplies in this line from us.



CANARY SEED-Recleaned and of splendid quality. Per lb., 15c (By mail, 20c.)

CANARY SEED MIXED-A mixture of the finest quality and in proper

CUTTLE FISH BONE—Good for digestion and general health. Each 10c; 25c per 1/4-lb.; 75c per lb. (By mail, 80c.)

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HEMP SEED—Birds are very fond of this seed; it is rich and should be fed with discretion. Per lb., 15c. (By mail, 20c.)

LETTUCE SEED—A slight sprinkle of this is much relished by canaries. Oz., 10c; ½-lb., 20c; per lb., 50c. (By mail ,60c.)

MAW SEED-Calculated to improve the song of canaries, etc. 1/4-lb., 10c; lb., 25c. (By mail, 30c.)

MILLET SEED—Nutritious and appetizing. Lb., 15c. (By mail,) 5 lbs., 60c. (By mail, 85c.)



FISH FOOD-Especially put up for fish in aquariums and globes, and should be fedregularly. We can supply it in wafer or in natural form. Per box, 10c. (By mail 15c.)

RAPE SEED-Will keep birds in excellent condition; feed with canary seed. Lb., 15c. (By mail, 20c.)

BIRD SAND-Silver, fine. Pkg., 15c; 2 for 25c. (By mail add 5c per pkg.)

SONG RESTORER-For canaries; revives the desire to be lively and sing more lustily. Per pkg., 25c. (By mail 30c.)

BURNETT'S FOOD-Will give immediate relief from the effects of moulting, eradicates all impurities from the blood, and restore to the songster, a strong and clear voice. Per bottle, 25c. (By mail 30c.)

BURNETT'S LOUSE POWDER-An effective remedy to be dusted on all kinds of birds. Per can, 25c. (By mail 30c.)

SUNFLOWER SEED-We are large handlers of this important food for parrots. We turn out only a very choice article. Per lb., 15c. (By mail 20c.)



BIRD BATHS-Made of onal glass. 20c each.

SEED CUPS-Made of opal glass. 15c each. 2 for 25c.

DRINKING CUPS-Made of opal glass. 15c each. 2 for 25c.

EGG FOOD AND TONIC CUPS-10c each.

Spratts Dog Foods.

DOG CAKES-In large cake form for older dogs.

PUPPY CAKES-A perfect food for puppies and for small breeds.

OVALS-Mixed to proper proportion and baked in small oval forms to carry in the pocket while hunt-

WEETMEET-A ground food for mixing with Postage extra. table scraps.

FIBO-Similar to Weetmeet, but containing a larger percentage of meat.

SPRATTS FLEA DOG SOAP-Per bar, 25c. (By mail 30c.)

Per lb., 15c. 10 lbs., 13½c per lb. 25 lbs., 13 c per lb. 50 lbs., 12½c per lb. 100 lbs., 12 c per lb.

PRICES ON BIRD SEED IN LARGER QUANTITIES, QUOTED ON APPLICATION.

Bird Houses

These Woods Craft Houses are well constructed of first class seasoned wood, covered with a tinted stucco which will last a lifetime. They are built for the true purpose of attracting the birds and will resist weather conditions. Instructions for placing on each hut.

Help protect and multiply our native birds. They will repay in song and chirp, add attractiveness and enliven grounds, besides destroying countless worms, bugs, beetles and grasshoppers which devour vegeta-

Wren Hutlet\$2.50	each
Chickadee Hutlet 2.50	each
Bluebird Hut 2.75	
Titmouse	
Robin Home, small 2.75	each
Robin Home, large	each

Fly Catcher Hut.									. :	\$2.75	each
Woodpecker Hut.											
Flicker Hut											
Squirrel Hut											
Winter Feederies.											
Martin Houses	 					 \$	8	.0	0	to \$	30.00

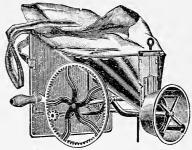


CLOVER SEED, GRASS AND GRAIN SEEDERS

CAHOON BROADCAST SEED SOWER.

The standard broadcast Seeder and one of the best manufactured. Sows all kinds of grain, Clover, Timothy and heavy seeds. Has a capacity of 4 to 6 acres per hour at a common walking gait and distributes seeds uniformly in about one-fifth the time required by hand. Very simple in operation and easy to adjust for quantity. Price, \$5.00.

TIN HORN SEEDER—A light, accurate Seeder which will broadcast clean seed from 30 to 40 ft. Length of the tube when extended is 30 inches. Good grade of heavy ducking is used on the sack. Weight only 12 ounces. Price, \$1.00.



CAHOON BROADCAST SEEDER

CYCLONE BROADCAST SEEDER-A geared machine which works with a crank and which has given good satisfaction. It is strongly built, good material; has 4-inch throat and cannot be choked even with strawy oats. Adapted for all kinds of clean heavy grain and Clover seed. Price, \$2.50.



LITTLE GIANT SEEDER—Formerly sold under the name of "The Little Giant." A general seeder, which has four pressed tin flanges and distributing wheel under the bottom; gearing wheel centered, making it easy to run. Has an accurate gauge. Sloping feed board and force-feed steel frame. This is one of the most widely used types. The sack holds one-half bushel; convenient hand hold and body shield. The machine is well braced. Price, \$2.50.

RITTENHOUSE MOLE TRAP

The simplest, safest and surest mole trap ever invented. Self-setting. No danger of its going off unless the trigger is touched. Made of all steel and tinned. The spears are spring steel, therefore do not have to be as long as soft steel. Price, \$1.00.

HUMUS

That portion of soil formed by decomposition of animal and vegetable matter.

"It is a valuable constituent of soil."-Webster.

Exhaustive tests have proven that properly bacterized Humus makes a balanced feeding for plant life, a food that can not be supplied otherwise. It has been recognized for some time that not only nitrogen but phosphorous and potash feedings must first be digested from the soil by proper bacteria before they can become available for plant feeding. Bacterized Humus is not sold to eliminate the use of fertilizers but to release the natural fertilizers from the soil and make them available. The average soil contains enough potash, but due to improper cultivation or acidity only a small portion has ever become available.

No less an authority than Harvey W. Wiley makes the statement that the average fertile soil under cultivation contains enough potash if liberated properly by bacterial action to supply plant life for more than a thousand years.

The Humus we offer is taken from a bog seventy-five feet in depth and has undoubtedly been in process of formation since the end of the glacial period. This Humus or peat is then passed through processes which more thoroughly break up the fibres, destroy harmful bacteria and weed seeds and is then inoculated with selected strains of soil bacteria.

Our bacterized Humus is odorless, free from weed seed and contains no insects harmful to plant life.

For pot plants, the garden or greenhouse it is advisable to use at the time of planting, application being made to the seed row or to roots of the plant.

Facts-Food put into the human body will not sustain life unless properly digested. Plant food (fertilizer) put into the soil will not benefit plant life until it is digested. Our bacterized Humus digests the fertilizers. 5 lbs., 25c; 25 lbs., 75c; 50 lbs., \$1.25; 100 lbs., \$1.75; 500 lbs., \$8.00; 1,000 lbs., \$15.00.



Packed 250 to a Box

Saves time and labor to anyone growing their own plants from seed.







READY TO USE

INSECTICIDES AND FUNGICIDES

Liquid Insecticides and Poisons cannot be sent by mail.

All prices subject to market changes.

*ARSENATE OF LEAD—One of the best and most effective of poisonous insecticides for leaf-eating insects, and more especially adapted to trees and shrubs, as it adheres to the foliage better. It is not so liable to be washed off by rains, and does not burn.

DRY-1/2 lb., 30c; 1 lb., 50c; 4 lbs., \$1.50; 12 lbs., \$4.00.



*KEY-CIDE POWDER-This Bordo Lead Powder is a Combined Insecticide and Fungicide. Kills bugs and prevents blight, rot, mildew and fungus in one spraying operation. Can be used for wet spraying or dry dusting on fruits, vegetables or flowers. Complete spray for gardens. One pound makes about 7 gallons ready to apply. ½-lb., 30c; 1 lb., 50c.



*BORDEAUX MIXTURE-For blight, mildew and all **BORDEAUX MIXIOHE—For bright, mildew and air fungus diseases. Can be used alone or in connection with Paris Green or Arsenate of Lead. For hardy foliage such as apple, pear, potato, tomato, egg plant, use 2 oz. to 3 quarts of water. For tender foliage such as peach, cherry and cucumber, dilute to one-half strength. ½-lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

*BLACK LEAF 40 (40% Nicotine Sulphate)—Highly recommended by the Experiment Stations as a spray for Black Aphis and sucking insects of this class. 1-oz. bottle, 35c; ½-lb., \$1.25; 2 lbs., \$3.50; 10 lbs., \$13.50.

*NICO-FUME LIQUID—For destroying aphis, thrip and red spider, making a good insecticide for fumigating green houses. Contains 40% nicotine. 14-lb. tins, 75c.

DRY LIME AND SULPHUR—Mixes with water—becomes a liquid testing the same as standard liquid solutions. It is claimed that the brand we carry is the only powdered form that is exactly the same as standard liquid solutions and can with safety to the tree be used in combination with an arsenate as a summer spray without the disadvantages of bulk, weight, leakage, etc. 1 lb., 35c; 5 lbs., \$1.40; 10 lbs., \$2.25; 25 lbs., \$4.00.

*HELLEBORE POWDER-For destruction of Slugs, Worms, Caterpillars, etc. Apply with powder gun and dust evenly over plants early in the morning while plants are wet with dew. $\frac{1}{2}$ -lb., 30c; 1 lb., 50c.

*WEED KILLER—A highly concentrated solution which dilutes one part to 50 parts of water. It is effective within 12 hours after application and on application will keep paths and roadways free from weeds for an entire season. 1 qt., 75c; ½ gal., \$1.10; 1 gal., \$1.75.



BUG DEATH-A non-poisonous powder to be applied dry or mixed with water and sprayed on the plants. It is death to the potato, squash and cucumber bugs, current and tomato worms. It is best applied dry with a duster or powder gun at the rate of about 12 lbs. per acre. Price, 1 lb., 20c; 3 lbs., 40c.

CARBOLA—The white paint that disinfects. 2 lbs., 30c; 5 lbs., 75c; 10 lbs., \$1.25.



HAMMONDS SLUG SHOT-One of the best insecticides for Vegetables in use. Non-poisonous to human life. Price, 1 lb., 25c; 5-lb. pkgs., 75c; 10-lb. pkgs., \$1.35.

CUT WORM KILLER-1 lb., 40c.

*SCALECIDE (Pratts)—A pre-paration of micible oils for San Jose

paration of micible oils for San Jose and other scale and some other and stays mixed but-does not form an emulsion. It is not as disagreeable to use as Lime Sulphur. As a winter spray use a solution I part Scalecide to 15 to 20 parts of water when trees are dormant. For summer spray, 1 part Scalecide to 25 to 30 parts of water. Prices, q.6.0c.; 1 gal., \$1.40; 5 gal., 6.25; 10 gal., \$10.60; 30 gal., \$26.00; barrel (50 gal.), \$38.00.

SULFOCIDE—For many fungous diseases of Fruit Trees, Grapes and small fruits. Also effective for Blight on Potatoes, Beans, Melons and other vegetables or where a strong fungicidal spray is needed. 1 pt., 50c; 1 qt., 85c; 1 gal.,

\$2.25.

POWDERED SULPHUR—Used principally to prevent and cure mildew on roses and other plants. 1 lb., 15c; 2 lbs., 25c; 5 lbs., 50c; 10 lbs., 90c

TOBACCO DUST—A good remedy for Green Fly, Aphis, Fleas, Beetles, etc. 1 lb., 10c; 4 lbs., 25c; 10 lbs., 50c.

SPRAY TABS—A complete insecticide in tablet form containing the proper amount of poison with other chemicals, to control insects, etc. Dissolve in water and use. Full directions on each package. 30 tablets in box, 30c.

*PARIS GREEN—Apply dry or in a solution of water. Paris Green is a strong and best known poison for potato bugs. Its effectiveness is recognized by all potato growers. Do not use on some fruits. On apple and other fruits use with Bordeaux Mixture. Never mix Paris Green with Lime-Sulphur solution. Price, ¼-lb., 20c; ½-lb., 30c; 1 lb., 55c; 2 lbs., \$1.00; 5 lbs., \$2.50.

FISH OIL SOAP—One of the best and safest remedies for Scale, sucking insects and plant lice on vegetables, shrubs and trees. Kills Aphis, Thrip, Melon-Lice and all insects sucking juices from trees. Is also effective for preventing and destroying Borers in trees as a wash. 4-lb., 10c; ½-lb., 15c; 1 lb., 25c.

WAX, Grafting-1 pkg., 15c; 1/2-lb., 25c; 1 lb., 40c. (By mail add 5c

ANSECTO (Rose Bug Destroyer).—Highly effective when used on Rose Bugs, many hard-bodied insects, Red Spider, Mealy Bug and other garden pests. Dilute with from 30 to 50 parts water. Thorough spraying is essential. Pt., \$1.00; trial size, 40c.

By mail or express at customer's expense.

TREE TANGLEFOOT—For protecting trees against climbing insect pests in a simple, economical and effective way; put a band of tree tangle-foot, from 3 to 5 inches wide completely around the tree. A perfect safeguard against Gypsy, Brown-Tail and Tussock Moth, Canker Worms and Ants, and other creeping insects. 1 lb., 60c; 5 lbs., \$2.75; 10 lbs., \$5.25; 20 lbs., \$9.75.

RAX



SAVES MONEY BY SAVING CROPS

It is estimated that rats and mice consume grain each year in the United States alone to the value of more than \$10,000,-000. Most of this waste can be saved if Rax is given a chance

RAX IS NOT A POISON

While it is absolutely deadly to rats and mice, it is harmless to human beings, domestic animals, poultry and birds. It may be used anywhere with complete safety.

RATS LEAVE BEFORE THEY DIE

Within a few days after eating food prepared with Rax, rats and mice become feverish and seek the open air, thus never dying indoors—always

HOW TO USE RAX

Add water to the bottle and shake contents until water is cloudy. Then moisten bait (bread, crackers or cheese) with the mixture and place it near the holes. Rax does not affect the taste of the bait.

Directions are furnished with each package. One bottle is enough for an ordinary house; allow one bottle to each 500 feet of floor space in large barns, mills, etc. Price, 75c per bottle, postpaid.

Insecticides prefixed by (*) cannot be mailed.

SPRAY CALENDAR

	Spray No. 1	Spray No. 2	Spray No. 3	Spray No. 4	Spray No. 5
PEACH	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime Sulphur or Scalecide. Controls leaf curl. San Jose scale, aphis and scab.		rot and aphis eggs.		
CHERRY	(Dormant Spray). With Lime Sulphur on sweet cherries only. Controls San Jose scale.	(Preblossom Spray). Apply Bordeaux Arsenate. Controls rot and curculio.	Just after blossoms fall. Apply Arsenate of Lead plus Black Leaf Forty. Controls rot, curculio and aphis.	One week after No. 3. Use Lime-Sulphur 1-75 plus Arsenate of Lead. Controls rot, curculio, leaf spot and mildew.	After the fruit i picked. Apply Bor deaux a long wit Arsenate if slugs ar present.
QUINCE	San Jose scale and leaf spot.	1	lear spot.	lear spot.	
APPLE	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime Sulphur or Scalecide. Controls San Jose scale, scurfy scale, aphis eggs and mite eggs.	(Preblossom Spray). When pink shows in cluster buds before buds open. Apply Bordeaux with Arsen- ate of Lead (add Black Leaf Forty if aphis are present). Controls apple scab, curculio, canker worm and aphis.	(Calyx Cup Spray). Just after petals fall, before calyx closes. Apply Lime Sulphur with Arsenate of Lead (add Black Leaf 40 if aphis are present). Controls apple scale, sooty fungus, curculico, codling mothand canker worm.	Fourteen days after petals fall. Apply Bordeaux and Arsenate of Lead. Controls apple blotch, codling moth and canker worm.	About July 25t Apply Bordeaux an Arsenate of Leac Controls beetle, roi apple blotch and cod ling moth.
PEAR	Same as apple.	Same as apple.	Same as apple.	Second week of July. Apply Ammoniacal C op per Carbonate instead of Bordeaux and thus prevent russeting fruit. Do not add Arsenate of Lead.	
PLUM	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime-Sulphu or Scalecide. Con- trols San Jose scale and aphis eggs.	When buds are swelling. Apply Bordeaux with Arsen- ate of Lead. Con- trols rot and curculio.	(European varieties). After calyx drops. Apply Bordeaux with Arsenate of Lead. (American and Japanese varieties). Use Lime-Sulphur 1-75 instead of Bordeaux.	(European varieties). Repeat No. 3 two weeks later. (American and Japanese varieties). Apply Lime-Sulphur 1-75 instead of Bordeaux. Controls rot, curculio and aphis eggs.	
GRAPE	Just before the blossoms open. Apply Bordeaux or Grape Dust. Controls mildew and black rot.	Just after fruit sets. Repeat No. 1. Controls black rot and mildew.	Two weeks later. Apply Bordeaux and Arsenate of Lead. Controls beetle and root worm.	1st to 10th of August. Bordeaux and Arsenate with soap as spreader. Apply with plenty of pressure. Controls berry worm and fun-	
CURRANT AND GOOSEBERRY	Apply Lime-Sulphur or Scalecide. Con-	When the leaves are unfolding. Use Bordeaux. Controls leaf spot and mildew.	pand, just as the blossoms open. Ap- ply Bordeaux and Arsenate of Lead	gous diseases. Whenever currant worm appears. Dust with Hellebore or Paris Green and Hydrated Lime. Controls mildew and currant worm.	
AND BLACKBERRY	(Dormant Spray) If bushes are infested with scale. Apply Lime-Sulphur of Scalecide. Controls Rose scale and Sar Jose scale.	5	While blossoms are open. Apply Arsen- ate of Lead. Con- trols beetle, which attacks bloom.	When young canes are 6 inches high. Spray with Bordeaux. Controls anthracnose on young cane.	
STRAWBERRY	When leaves are half grown, before blooming. Apply	One week later. Apply Spray No. 1 on young plants. Omit the spray on old plants. Controls leaf spot.	lebore for leaf rollers and slugs.	After fruit is picked. Mow the vines close to the ground, rake off tops and burn. Spray new tops with Bordeaux. Controls mildew and fungus diseases.	

FERTILIZERS

PULVERIZED LIMESTONE— A Lawn and Garden Conditioner

The agricultural value of lime is well known and it is an economic neutralizer for soil acidity, also for binding sandy soils and loosening clay soils. For renewing old lawns use at the rate of 100 pounds for each four hundred square feet.

For new lawns give a generous coating at the rate of 1,000 to 2,000 pounds per acre for sandy soils and 2,000 to 3,000 pounds per acre for clay soils.

Lime will be found very beneficial in the growing of all garden crops, fruit trees and flowers, also for leguminous crops, such as Alfalfa, Sweet Clover, Red Clover, Soy Beans, Cow Peas, Vetches and, etc.

Per bag of 100 lbs., \$1.25; per 500 lbs., \$5.50; per 1,000 lbs., \$10.00.

PULVERIZED SHEEP MANURE—This is a pure natural manure and one of the most nutritious foods for plants. Its effect is immediate. It is very rich, safe and gives quick results. It will give excellent results on flower beds, lawns or in vegetable gardens, as it contains all the elements for promoting a quick, luxuriant growth, as well as adding body to the plant. Can be used either in dry form or dissolved to make a liquid manure. If applied dry, no raking off is required as it does not disfigure the grounds, nor does it contain seeds of foul weeds, nor offensive odor.

DIRECTIONS—For Lawns, apply broadcast at the rate of four to six hundred lbs. per acre in February. March or April in spring, or in September or October in the fall. For pot plants mix one part of sheep manure to six parts of soil. For use in the vegetable garden apply either broadcast and rake in or in drills and mix slightly with the soil. For Liquid application use 1 lb. to 5 gallons of water. Prices, 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.25.

PURE BONE MEAL—This pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 400 to 500 lbs., per acre. 1 lb., 10c; 5 lbs., 35c; 10 lbs., 65c; 25 lbs., \$1.25; 50 lbs., \$2.00; Bag of 125 lbs., \$4.00.

CATTLE MANURE (Shredded)—A substitute for stable manure in gardens and greenhouses, as it supplies plant food, humus and organic matter; largely used for rose culture and for mulching. The quality we offer is selected manure taken from paved Stock Yards cattle pens—dried and sterilized by a high temperature direct heat process which kills weed seeds, fungus and disease germs. 100-lb. bags only. Per bag of 100 lbs., \$2.25.

HYDRATED LIME—This lime is used on lawns, etc., for sweetening acid or sour soils. Bag of 50 lbs., \$1.10.

SULPHATE OF AMMONIA—Contains approximately 25 per cent of ammonia and comes in fine crystals which are very nice to apply broadcast. Owing to its firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries 5 per cent more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses five pounds of Nitrate of Soda. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.50.

NITRATE OF SODA—As a top dressing use at the rate of 100 lbs. per acre between the rows when the plants are well established, on the following vegetables: Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery and Onions. For Asparagus, a top dressing of 250 lbs. per acre when the young shoots are starting in the spring. For Strawberries, apply between the rows at the rate of 100 lbs. per acre at the time of blossoming. For the home garden, apply a solution of one ounce to two gallons of water. I lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.50.



Growers of fine flowers, shrubs and vegetables for the best markets and for exhibition, fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-planT, an odorless, highly concentrated plant food, in tablet form, with guaranteed chemical analysis of 11 per cent nitrogen, 12 per cent phosphoric acid, 15 per cent potash. The proportions are accurate, there is no wasted filler, and in this form you apply plant food exactly when and where and as needed.

Easy to Use—Simply insert tablets in soil near plants or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package. Order Stim-U-planT tablets with your seed and plant order.

Price, 10 tablets for 15c; 30 for 25c; 100 for 75c; 1,000 for \$3.50.



PLANT MARVEL—Ensures bushy ferns and healthy flowers and plants, It is a pure, rich, quick-acting plant tonic and contains 61.30 per cent of plant food. Begins to feed instantly. Nourishes continuously and plentifully Package, 25c; ½-lb. container, 60c; 1-lb. container, \$1.00. The \$1.00 size is the most economical.



SPRAYERS, Compressed Air and Knapsack AUTO SPRAY—A Self-Operating Automatic Sprayer

One of the strongest and most simple in its parts. It can be used in the garden, for small trees and shrubs or for spraying weeds, cattle or whitewashing.

Equipment consists of two feet of half-inch hose, a fine sprayer nozzle, one solid steam cap and stop-cock for shutting off. A coarse, whitewash nozzle can be supplied extra if desired.

Auto Spray-No. 9-D.	Galvanized steel with stop-cock.	\$ 6.50
Auto Spray-No. 9-B.	Brass tank with stop-cock	9.50
Extension Pine-2-ft. le	engths for spraying tall shrubs, trees, etc. Solid Brass, each	75

HUDSON COMPRESSED AIR SPRAYER

The Hudson Perfection Sprayer has a tank made like a steam boiler. The all-riveted seams give the necessary strength for developing a high pressure, which is absolutely essential for good results. The all-brass pump is placed inside the tank and is easily removed.

No. 110B.	Brass Tank, 4 gallons.	Price, each\$ 8.50	
		JUSTRITE JUNIOR COMPRESSED AIR SPRAYER	

Galv. Tank, 2½ gallens.	Price, each	\$ 5.00
Brass Tank, 21/2 gallons.	Price, each	7.00

MASON JAR SPRAYER

CONTINUOUS SPRAYER

This gives a uniform and continuous spray on both the forward and backward stroke of the plunger. The straight tube and nozzle as well as the siphon tube are all removable for the purpose of cleaning.

Can be used for insecticides, applying oil, disinfectants as well as regular spraying materials and gives a fine effective spray. Capacity 1 qt. All tin, \$1.00. Brass, \$2.00.

We also carry a line of lighter weight hand sprayers, too numerous to mention, at 40c each and up.



Brass Spray Pumps

These are the best equipped pumps made and are to be used in buckets, barrels, etc.

They are useful not only for Insecticides but whitewashing and pumping in small quantities.

Those listed below will be found thoroughly satisfactory and our prices are much lower than the manufacturer's list prices.

MYER'S LEVER BUCKET SPRAY PUMP No. 324

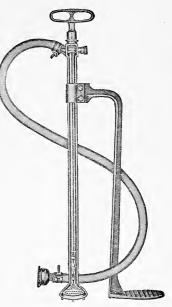
A new pattern, 1½-inch cylinder; can be used in a bucket or attached to the top of a barrel. Has Vermorel nozzle throwing a fine or coarse spray and single stream. Patent agitator. Price...\$7.00



LEVER BUCKET

MYER'S GENERAL PURPOSE SPRAYER AND WHITE WASHING PUMP

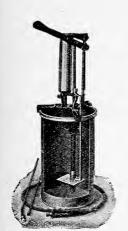
AUTO SPRAY No. 6



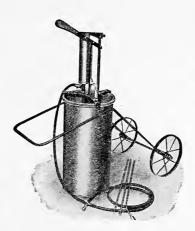
AUTO SPRAY No. 6

Paragon Sprayers

THESE SPRAYERS have self-cleaning strainers and cannot clog the nozzle when spraying, as the agitator passes over it with each stroke of the pump, dislodging any particles the suction may draw into its surface. They are the Sprayers adapted for spraying insecticides, whitewashing or applying cold water paint. Every Paragon Sprayer is fully guaranteed, and if any part proves defective same will be immediately replaced free of charge. 100 lbs. pressure is easily obtained with this sprayer.



No. 1. PARAGON SPRAYER



No. 3. PARAGON SPRAYER



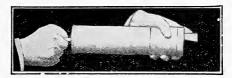
No. 4. PARAGON SPRAYER-MOUNTED

- No. "0"—Capacity 3½ gallons.—Equipment 4 ft. of 6-ply hose, 3 ft. spray pipe, 2 spray nozzles. \$12.50.
- No. "1"—Capacity 6 gallons.—Equipment 5 ft. 6-ply hose, 5 ft. spray pipe, 2 nozzles. Net price, \$17.50.
- No. "3"—Capacity 12 gallons.—Equipment 10 ft. 6-ply hose, 7½ ft. spray pipe, 2 spray nozzles. Net price complete, \$25.00. Without truck, \$21.50.

 No. "4"—Capacity 28 gallons.—Equipment 20 ft. 6-ply hose, 10 ft. spray pipe, 2 spray nozzles, net price complete with barrel, \$39.50. Not mounted on wheels, price, \$29.50.
- No. "5"—Capacity 50 gallons.—Equipment 25 ft. 6-ply hose, 10 ft. spray pipe, one 3-way spray nozzle, 1 single spray nozzle. This Sprayer has a solid cast brass pump and large air chamber mounted in a strong barrel but not on wheels.

It is positively the very best of hand-power Sprayers made for extensive tree spraying. Net price, \$45.00.

Dry Powder Guns and Duster



FEENY DUST GUN

Genuine Philadelphia Lawn Mowers

The Philadelphia Lawn Mower has stood the test for years, and is acknowledged to be one of the best and a strictly High-Grade Mower.

Style K—5 blades, 10-in. wheel, 61%-in. cylinder. Single pinion, geared on both sides. The greatest diameter cylinder with five blades, insures fine cut and with its large driving wheels, is light running. 16-in., \$19.00; 18-in., \$20.50; 20-in., \$22.00.

Style C-4 blades, 8½-in. wheel, 5¼-in. cylinder. This style medium high wheel is to supply a demand for a mower which has real merits, and is light running, durable and easy to handle. 16-in., \$16.50; 18-in., \$18.00; 20-in., \$19.25.

DEWEY-4 blades, 8-in. wheel, 51-in. cylinder. A strictly high-grade lawn mower within the reach of owners of small lawns. Blades of Crucible Steel

Horticultural Tools and Sundries

LAWN SWEEPERS, PENN\$35	5.00
HOES—Standard Socket Garden	00.1
" Onion, with two prongs	.50
RAKES—Steel Garden, 14 teeth	.75
" Lawn, Wire, 30 "	1.00
" Wooden, 20 "	.75
TROWELS (Ordinary Garden)—6-inch	.10
" Solid steel	.30
" Extra heavy	.35
" Forged steel, very strong	1.00

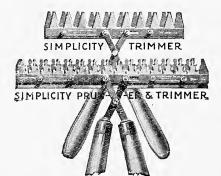


TRANSPLANTING TROWELS .- Can be used either as a transplanter, dibble or weed digger; blade being narrow and deeply curved\$0.30 FLOWER GARDEN SETS.—English pattern, 1-5 tooth rake, 1 trowel, Hedge Shears..... 3.00 Rhodes long handle Pruning Shears, 20-inch, 24-inch and 30-inch. Each.. 3.50 One Hand Pruning Shears......\$1.25, \$1.50, \$2.00 and 2.50



STEEL GARDEN WEEDER. - One-piece pressed steel. Has five steel fingers. Each......30c

MOLE TRAP. See page 87.



SIMPLICITY HEDGE PRUNER AND TRIMMER

For pruning back old growth and trimming new

With this tool you can actually do as much work in one hour as you ormerly did in four hours with the old-style pruner or lopping shears. PRUNER AND TRIMMER......\$6.00

DANDELION WEEDER AND ASPARAGUS KNIFE, made of one piece hard, stiff steel\$0.50
BASKETS, Wire Hanging-12-inch, 35c; 16-inch, 60c.
HOT BED THERMOMETERS.—Length 16½-inch, brass pointed and graduated to 230°
SPADING FORKS 1.90
SPADING FORKS, small hand
SPADES, D handle 1.75
RAFFIA, Natural—The best tying material for plants, also used for making baskets, etc. Per lb., 50c; 5lbs., \$2.00.
Dalos "PEST EVER" FLOWER ROYES Quality



This box embodies attractive appearance, general utility and durability.

The heavy roll edge adds greatly to the appearance, a device inside the box permits the application of water to the plants without the slightest degree of untidyness which frequently arises from watering plants by sprinkling, and the good quality japan over galvanized metal warrants long life.

All boxes $7\frac{1}{4}$ inches wide at bottom and $6\frac{1}{2}$ inches deep. 18-Inch......\$1.25 each 24-Inch...... 1.50 each 30-Inch.....\$2.00 each 36-Inch......2.50 each

PLANT TUBS

An excellent new tub, cheap, neat and durable. Made from 3-inch Cypress.

No.	4.	9	inches	diameter,	9	inches	depth				.:	\$0.85	
No.			ĸ	"	9	ü	ū					1.10	
No.	7.	12	u	u	11	u	и					1.65	
No.	9.	14	"	u	13	u	u					2.20	
No.			u	u	15	"						2.75	
No.	13.	18	u	"	17	"	4					3.50	
No.	14.	19	"	ĸ	18	"						4.00	

Handles 35c per pair extra. All Prices Subject to Market Changes.

		FLOWE	R POTS		
Size		Each	Size		Each
5-Inch		.\$0.08	7-Inch		. \$0.18
6-Inch			8-Inch		25
GRASS H	OOKS-	ery stro	ng		75
GRASS H	ooks-v	Vith long	handle		1.35
GRASS S	HEARS				65
				Per	Per
	LA	BELS		100	1000
TREE	LABELS	31/2 incl	h copper wired.		\$3.00
POT	**	41/2 "			2.50
"	44	5 "		35	3.00
"	"	6 "		40	3.50
GARDEN	**	8 "		- 00	8.00
44	44	10 11		. 1.00	9.00
	•••	10 "		. 1.00	0.00
PLANT	"	3x½ "	weatherproof		2.50



ANT WEIGHT EAWN HOLLEHO.	
No. 3 14 in. diameter 20 in. long 46 lbs. em No. 5 18 in. diameter 23 in. long 76 lbs. em No. 7 23 in. diameter 23 in. long 94 lbs. em	mptv 274 lbs. filled 15.00

LAWNVAC BAMBOO GARDEN RAKE. Removes every trace of dead grass, weeds, etc. Light, durable, efficient. Weighs but ¾ of a pound, yet as strong as iron. 18 inches wide, 44 teeth. Each.....\$1.00

PLANET JR. TOOLS

Complete illustrated catalogue on request.
Our net prices are less than Planet Jr. Catalogue Prices.



PLANET JR. WHEEL HOES

No. 12. DOUBLE WHEEL HOE.—Has 8 cultivating teeth and weeding tools. Our net price complete. \$11.00

No. 16. SINGLE WHEEL HOE.—Has 7 cultivating teeth, a garden plow. Our net price............\$9.00

FIRE FLY GARDEN PLOW.—A tool for small gardens.

It will throw a furrow 4 to 6 inches wide. Our net

FARMERS No. 19, SINGLE WHEEL HOE CULTI-VATOR AND PLOW. Our net price...........\$5.75



MAKES HOME GARDENING A DELIGHT

The TRUE TEMPER FAIRY No. G5 costs but a trifle more than an ordinary hoe and will do ten times the work.

It weeds and cultivates without giving you a lame back—keeps you smiling.

It has a strong steel frame with best selected ash

Price.....\$2.00

HILL AND DRILL SEEDERS

No. 4. COMBINED HILL AND DRILL SEEDER, with 2 hoes, 3 cultivating teeth and plow, as shown. Hopper holds 3 pints. Our net price complete....\$18.50 As a seeder without tools, our net price........... 14.50

No. 3. HILL AND DRILL SEEDER—without cultivating tools, hopper holds 3 quarts, our net price..\$18.00

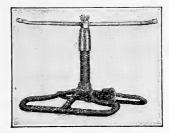
No. 25. HILL AND DRILL SEEDER COMBINED, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW. Has 8 cultivating tools. Our net price complete.. \$22.00

No. 12 Planet Jr. Double and Single Wheel Hoe, Combined

Equipment:

One Pair of 6-inch Hoes, Four Steel Cultivator Teeth, One Pair of Plows, Two Leaf Lifters...\$11.00

LAWN SPRINKLERS ROTARY AND OSCILLATING SPRINKLERS



An effective sprinkler for lawns, gardens or flower beds. Is adjustable at will from bell shaped spray or full stream, 15 to 80 feet diameter. Saves time, labor and hose wear. Three sizes as illustrated.

RAINBOW LAWN SPRINKLER

\$2.25

Distributes water in small particles like mist as 40 to 50 feet. Supported on

and rain combined over an area 40 to 50 feet. Supported on a brass sled, which may be easily drawn over the lawn. . \$2.50

NEW WAY SPRINKLER



\$8,00



\$3.75

WILSON AND THOMPSON SPRINKLERS

Stock and Poultry Supplies

"Startrite" Chick Food

AN UNEQUALED FOOD FOR BABY CHICKS.

Gives the young chicks all the food elements required by them to develop properly and in the correct proportions. No guess work. Can be fed either wet or dry. Chicks will mature rapidly and in the best condition with no losses. 50 lbs..... \$3.25 100 lbs......\$5.70

10 lbs.....80c 25 lbs..... \$1.85

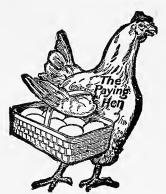
A Little Putnam Stove is nine inches in diameter and four inches high.

The combustion is perfect, doubling the heat value of the oil. The oil tank holds three pints and burns three to four weeks without refilling or any other attention. The wick never needs trimming.

Little Putnam Stove

Each.....\$2.50

DR. HESS POULTRY AND STOCK REMEDIES



oultry Pan-A-Cea-1½ lbs., 25c; 5 lbs., 75c; 12 lbs., \$1.50.

Instant Louse Killer-25c per

White Diarrhoea Cure-25c and 50c per pkg.

Dip and Disinfectant-Pt. bottl 50c; qt., 75c; ½-gal., \$1.00; 1-gal., \$1.75.

Stock Tonic-25c and 50c per

ME POULTRY FOOD

A perfectly balanced ration of grain without grit, shell or other adulterants. Current prices.

ME CHICK FEED

A perfectly balanced ration of grain and seeds for young chicks. Current prices.

Mica Grits. Coarse and fine. 4 lbs., 10c; 100 lbs., \$1.50. Oyster Shell. 4 lbs., 10c; 100 lbs., \$1.40.

Charcoal, fine or coarse. 1 lb., 10c; 3 lbs., 25c.

Meat Scraps. Protein 50% .3 lbs., 25c; 25 lbs., \$1.25; larger quantities, current prices.

BUTTERMILK EGG MASH Protein 20%; Fat 5%.

81/3 lb. bag, 40c; 100 lbs., \$4.25.

CELLULOID LEG BANDS

All colors and sizes. 10c doz. 65c 100.

CHAMPION LEG BANDS

In sets, numbers 1 to 12, 15c set.

In sets, numbers 1 to 25, 25c set. In sets, numbers 1 to 50, 40c set.

In sets, numbers 1 to 100, 75c set.

FLY AND GERM KILLER ½ gal. cans.....\$0.75

1 gal. cans.....\$1.00

MOES DRY MASH HOPPER

8½-in., \$1.50 12-in., \$2.00

24-in., \$2.80

AUTOMATIC FOUNTAIN AND CHICKEN FEEDER

This appliance for chicks, feeds water, grain grit, etc., automatically. Is very easy to fill and operate. Just lift trigger which releases pan, clip remaining on jar, leaving pan without any obstruction, affording easy clean-ing. This is an absolutely ing. sanitary fountain made to fit any half-gallon, quart or pint Mason jar. We do not furnish jars. 10c each.





Patented Dec. 11, 1917.

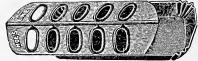
LAWN PARK BROOD COOPS—Made from galvanized materials, will not rust, and is proof against all chick enemies. Size, closed, 18x24 inches; extended, 18x48 inches. Height, 19½ inches. \$4.50



GRIT AND SHELL BOX

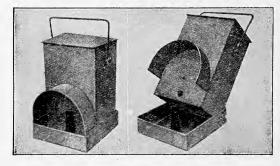
.....90c

Has three compartments. Each.....



BABY CHICK FEEDING TROUGH

Made of Galvanized Iron and used for baby chicks. Detachable top makes them easy to fill and keep clean. 12-inch length, 25c each; 24-inch length, 50c each.



SQUARE BOTTOM DRINKING FOUNTAIN

Made of heavy Galvanized Iron. Easy to clean. Prevents disease. Prices, 2 qts., 95c; 1-gal., \$1.20; 2-gal., \$1 50.

Baby Chicks

Beginning February 1st, we will have on sale at our store, 228-230-232 East Fourth Street, day old baby chicks, Rhode Island Reds, Anconas, Barred Rocks and Leghorns. Can also supply other breeds on special order. These chicks for sale at store only.

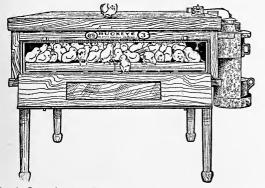
BUCKEYE INCUBATORS





No. 14	Capacity 65 Eggs	6.50
No. 16	Capacity 110 Eggs 2	7.50
No. 17	Canacity 210 Eggs	6.75

Standard



No. 1 Capacity 110 Eggs	\$37.50
No. 2 Capacity 175 Eggs	44.50
No. 3 Capacity 250 Eggs	57.75
No. 4 Capacity 350 Eggs	68. 00
No. 5 Capacity 600 Eggs	107.00

"Standard" Approved by
THE NATIONAL BOARD OF INSURANCE
UNDERWRITERS

Why the Buckeye Succeeds

The unprecedented success which has followed the Buckeye for twenty-five years is primarily due to the invention of the Buckeye hot-water system. Without this wonderful system of hot water heating, that perfect balance between the temperature, moisture and ventilation, which is so necessary to successful incubation, would be a physical impossibility. Our ability to heat the egg chamber without cooking all the moisture out of the air is not only responsible for the abundant supply of natural moisture, but at the same time the soft radiated heat from the hot water tank provides an absolutely uniform temperature, and permits the perfect ventilation of the egg chamber at the same time.

FUMES FROM LAMP CANNOT ENTER A BUCKEYE

Too much emphasis cannot be attached to the importance of keeping impure gases and fumes out of an incubator. Instead of passing the hot air fumes through the incubator, with a likelihood of leakage in the conductor at any time, we heat the water on the outside—sending it circulating around the egg chamber—and keep all the fumes from the lamp on the outside. It takes but a very small portion of lamp fumes to kill the developing chicks, and by circulating hot water through the egg chamber instead of hot air, we entirely eliminate all possibility of damage to the eggs.

Guarantee

The Buckeye is GUARANTEED to hatch MORE CHICKS and STRONGER CHICKS than any other incubator.

It is further guaranteed:

To require no artificial moisture. To operate satisfactorily in any temperature down to freezing, and to require no attention to the regulation from the time a hatch is started until it is finished.

The perfect construction of all its mechanical parts is also guaranteed, and any incubator or part thereof that does not fulfil our guarantee in every particular will be replaced without question any time within forty days.

(Signed) THE BUCKEYE INCUBATOR CO.

We can supply all parts for Buckeye Incubators and Brooders.

Oil lamp complete\$2	.25
Gas Burner 2	.00
Thermometers	.00

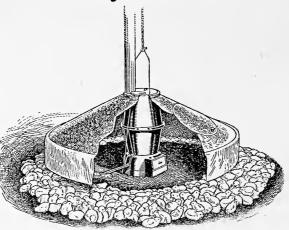
ASK FOR A BIG BUCKEYE CATALOGUE.

THE "STANDARD"

Colony Brooder

No. 18 Broods Up to 500 Chicks \$21.50

Self Feeding Self Regulating



No. 19 **Broods** Up to 1000 Chicks \$26.50

Saves Labor Everlasting

Showing a Standard Colony Brooder in Operation with 1,050 Chicks

The Standard Brooder

Is Without Doubt the Most Successful Brooding Device Ever Invented

This Brooder has actually revolutionized the whole poultry industry by helping the breeders to raise a much larger percentage of their young stock with just about one-fourth of the labor.

For the big breeder it has been a veritable godsend, and in a large number of cases has turned money losing propositions into highly profitable plants, while for the smaller breeder it has been just as valuable through its ability to bring the young stock to quicker maturity and saving many valuable fowl that, under ordinary conditions, never would have survived.

It is the very simplicity of the Standard that makes it the best brooder on earth. With only a few simple parts the Standard accomplishes with never-failing certainty those things in which the more complicated

devices fail.

We also carry No. 25 which broods up to 1200 Chicks, and is more adapted to burning soft coal \$30.00

Buckeye "Blue-Flame" Brooders

A High Power Oil Burning Brooder

That operates on the same Successful Principle as the "STANDARD" Coal-Burning Brooder. NO COMPLICATED LEVERS, VALVES OR THERMOSTATS

Equipped with a Blue-Flame Burner that is absolutely Smokeless, Odorless and Noiseless.

No. 27, Capacity 200 Chicks, \$17.50. No. 28, Capacity 350 Chicks, 20.00. No. 29, Capacity 500 Chicks,

Buckeye Portable Brooder

The Oil Burning Brooder With All the Desirable Features of the Modern Coal Burner

Guaranteed to furnish an abundance of heat in any température down to freezing.

Guaranteed to be absolutely free from all gases or odors and to provide a circulation of pure, fresh air every minute of the day.

Sold on Thirty Days' Approval—and You Write Your Own Money-Back Guarantee.

No. 20 Capacity 60 Chicks \$11.75

No. 21 Capacity 100 Chicks \$15.50

No. 22 Capacity 150 Chicks \$19.00

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